

**F E B R U A R Y 2 0 0 5**

# **FY 2006 Budget Submission**

**for Congress**

**BONNEVILLE**  
POWER ADMINISTRATION



# **Bonneville Power Administration**

## **Proposed Appropriations Language**

Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for official reception and representation expenses in an amount not to exceed \$1,500.

During fiscal year [2005]2006, no new direct loan obligations may be made.

## **Explanation of Changes**

The proposed appropriations language restricts new direct loans in FY [2005]2006 as in FY [2004]2005.

# Bonneville Power Administration

## Overview

### Summary by Program

(accrued expenditures in thousands of dollars)

	FY 2004	FY 2005	FY 2006
CAPITAL INVESTMENTS			
Power Business Line .....	136,806	199,658	184,400
Transmission Business Line .....	273,815	198,260	266,579
Capital Equipment & Bond Premium .....	28,081	35,022	36,491
Total Capital Investments .....	438,702	432,940	487,470
Accrued expenditures will require budget obligations of ..	438,702	432,940	487,470
Operating Expenses .....	2,642,075	2,946,770	2,976,655
Projects Funded in Advance .....	41,317	153,791	147,359
CAPITAL TRANSFERS (cash) .....	598,462	303,098	371,560
BPA NET OUTLAYS .....	-61,000	-10,000	-10,000
BPA STAFFING (FTE) .....	3,136	3,166	3,166

#### Summary by Program Notes:

These budget estimates are subject to continual change due to changing economic and institutional conditions in the electric utility industry in the Pacific Northwest.

Net Outlay estimates are based on forecasted market conditions, current cost savings to date, and anticipated use of rate adjustment and financial management tools. Net Outlays will change throughout the rate period as BPA experiences actual market and hydro conditions and responds with management actions.

Revenues, included in the Net Outlay formulation, are calculated consistent with rate period management goals and assume a number of rate, cost and cash adjustments. Assumed adjustments include the use of a combination of tools that include Cost Recovery Adjustment Clause (CRAC) adjustments, cost re-estimates, net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Adjustments for depreciation and 4(h)(10)(C) credits are also assumed.

## Preface

The strategic mission of Bonneville Power Administration (Bonneville or BPA) is to create and deliver the best value for its customers and constituents as it acts in concert with others to assure the Pacific Northwest:

- An adequate, efficient, economical and reliable power supply;
- A transmission system that provides open and non-discriminatory transmission access, that is adequate to the task of integrating and transmitting power from federal and non-federal generating units, providing service to BPA's customers, providing interregional interconnections, and maintaining electrical

- reliability and stability; and
- Mitigation of the Federal Columbia River Power System (FCRPS) impacts on fish and wildlife.

BPA is committed to cost-based rates, open and non-discriminatory transmission access, and public and regional preference in its marketing of power. BPA will set its rates as low as possible consistent with sound business principles and the full recovery of all of its costs, including timely repayment of the Federal investment in the system.

The organization of BPA's FY 2006 budget reflects Bonneville's business line basis for utility enterprise activities. Bonneville's two major areas of activity on a consolidated budget and accounting basis include Power and Transmission with administrative costs included. The Power Business Line (PBL) includes line items for Fish and Wildlife, Conservation and Energy Efficiency, Residential Exchange, Associated Projects O&M Costs, and Northwest Power and Conservation Council (Planning Council, Council).

This Overview describes Strategic Context, Mission, Benefits, Strategic Goals, and Funding by General Goal. The Annual Performance Results and Targets, Means and Strategies, and Validation and Verification sections address how the goals will be achieved and how performance will be measured. Finally, this Overview will address Program Assessment Rating Tool (PART) and Significant Program Shifts.

## **Strategic Context**

Following publication of the Administration's National Energy Policy, the Department of Energy (Department or DOE) developed a Strategic Plan that defines its mission, four strategic goals for accomplishing that mission, and seven general goals to support the strategic goals. Each program has developed quantifiable goals to support the general goals. Thus, the "goal cascade" is the following:

Department Mission – Strategic Goal (25 yrs) – General Goal (10-15 yrs) – Program Goal (GPRA Unit) (10-15 yrs)

To provide a concrete link between budget, performance, and reporting, the Department developed a "GPRA unit" concept. Within DOE, a GPRA unit defines a major activity or group of activities that support the core mission and aligns resources with specific goals. Each GPRA unit has completed or will complete a PART. A unique program goal was developed for each GPRA unit. A numbering scheme has been established for tracking performance and reporting.

The goal cascade accomplishes two things. First, it ties major activities for each program to successive goals and, ultimately, to DOE's mission. This helps ensure the Department focuses its resources on fulfilling its mission. Second, the cascade allows DOE to track progress against quantifiable goals and to tie resources to each goal at any level in the cascade. Thus, the cascade facilitates the integration of budget and performance information in support of the GPRA and the President's Management Agenda (PMA).

## **Mission**

The strategic mission of Bonneville is to create and deliver the best value for its customers and constituents as it acts in concert with others to assure the Pacific Northwest:

- An adequate, efficient, economical and reliable power supply;
- A transmission system that is adequate to the task of integrating and transmitting power from federal and non-federal generating units, providing service to BPA's customers, providing interregional interconnections, and maintaining electrical reliability and stability; and
- Mitigation of the FCRPS impacts on fish and wildlife.

BPA is committed to cost-based rates, open and non-discriminatory transmission access, and public and regional preference in its marketing of power. BPA will set its rates as low as possible consistent with sound business principles and the full recovery of all of its costs, including timely repayment of the Federal investment in the system.

## **Benefits**

Bonneville provides electric power (about 40 percent of the electricity consumed in the region), transmission (about three-fourths of the region's high voltage transmission capacity), and energy efficiency throughout the Pacific Northwest, a 300,000 square mile service area. Bonneville markets the electric power produced from 31 operating Federal hydro projects in the Pacific Northwest owned by the U.S. Corps of Engineers (Corps) and the U.S. Department of Interior, Bureau of Reclamation (Bureau), and also acquires non-Federal power, including the power from the Columbia Generating Station, to meet the needs of its customer utilities. Bonneville also supports the protection and enhancement of fish and wildlife, and provides leadership in conservation and renewables development, as part of its efforts to preserve and balance the economic and environmental benefits of the FCRPS.

## **Strategic, General, and Program Goals**

The Department's Strategic Plan identifies four strategic goals (one each for defense, energy, science, and environmental aspects of the mission plus seven general goals that tie to the strategic goals). The Bonneville program supports the following goal:

**Energy Strategic Goal:** To protect our national and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy.

**General Goal 4, Energy Security:** Improve energy security by developing technologies that foster a diverse supply of reliable, affordable and environmentally sound energy by providing for reliable delivery of energy, guarding against energy emergencies, exploring advanced technologies that make a fundamental improvement in our mix of energy options, and improving energy efficiency.

Bonneville's Program Goal contributes to the General Goals in the "goal cascade." This goal is Market and Deliver Federal Power:

**Program Goal 04.54.00.00 Market and Deliver Federal Power:** Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Council's Control Compliance Ratings, meeting planned repayment targets, and achieving a recordable accident frequency rate at or below our safety performance standard.

**Contribution to General Goal 4:**

Bonneville contributes to this goal through its strategic vision that emphasizes the basic core values of reliability, low rates consistent with sound business principles, environmental stewardship, and accountability to the region. BPA has renewed its emphasis on performance and has adopted 24 agencywide objectives that are key to achieving its mission. These objectives, aligned using the balanced scorecard model, are focused on stakeholder value, financial performance, internal operations, and people and culture.

**Funding by General and Program Goal**

(Accrued Expenditures)

(dollars in thousands)

	FY 2004	FY 2005	FY 2006	\$ Change	% Change
General Goal 4, Energy Security					
Program Goal 04.54.00.00					
Bonneville Power Administration					
CAPITAL INVESTMENTS					
Power Business Line . . . . .	136,806	199,658	184,400	-15,258	-7.6%
Transmission Business Line . . . . .	273,815	198,260	266,579	+68,319	+34.5%
Capital Equipment & Bond Premium	28,081	35,022	36,491	+1,469	+4.2%
Total Capital Investments . . . . .	438,702	432,940	487,470	+54,530	+12.6%
Accrued expenditures will require budget obligations of . . . . .	438,702	432,940	487,470	+54,530	+12.6%
Operating Expenses . . . . .	2,642,075	2,946,770	2,976,655	+29,885	+1.0%
Projects Funded in Advance . . . . .	41,317	153,791	147,359	-6,432	-4.2%
CAPITAL TRANSFERS (cash) . . . . .	598,462	303,098	371,560	+68,462	+22.6%
Net Outlays . . . . .	-61,000	-10,000	-10,000	0	+0.0%
BPA Staffing (FTE) . . . . .	3,136	3,166	3,166	0	0.0%

**Funding by General and Program Goal Notes:**

These budget estimates are subject to continual change due to changing economic and institutional conditions in the electric utility industry in the Pacific Northwest.

Net Outlay estimates are based on forecasted market conditions, current cost savings to date, and anticipated use of rate adjustment and financial management tools. Net Outlays will change throughout the rate period as BPA experiences actual market and hydro conditions and responds with management actions.

Revenues, included in the Net Outlay formulation, are calculated consistent with rate period management goals and assume a number of rate, cost and cash adjustments. Assumed adjustments include the use of a combination of tools that include CRAC adjustments, cost re-estimates, net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Adjustments for depreciation and 4(h)(10)(C) credits are also assumed.

## **Major FY 2004 Achievements**

BPA passed a major milestone of its infrastructure program in December 2003, when it energized the Kangley-Echo Lake 500-kilovolt transmission line, the first major new high voltage line in the Northwest since 1987. BPA also completed the Grand Coulee-Bell 500-kilovolt transmission line, which will increase capacity in the East to West corridor from 2,800 megawatts to 4,200 megawatts.

The Celilo modernization project, completed in April 2004, will maintain with greater reliability the transmission line capacity of the 846-mile Pacific Direct-Current (DC) Intertie running from Los Angeles, California, to the northern Oregon border. BPA and the Los Angeles Department of Water and Power began work in 2001 to modernize the converter stations at both ends of the Intertie to maintain the DC line's reliability and capacity. The modernization will maintain the 3,100-megawatt capacity of the line for another 30 years. Without the upgrade, DC capacity would be 1,100 megawatts.

Cost management was a focus throughout BPA in 2004 and continues as a focus in future planning. BPA captured \$70 million in power program-related cost reductions in FY 2004 over what was expected when rates were set in August 2003. On the transmission side, BPA cut operating costs by more than \$65 million in FY 2004, largely offsetting a reduction in revenue estimates from the rate case.

## Annual Performance Results and Targets

### Bonneville Power Administration

FY 2001 Results	FY 2002 Results	FY 2003 Results	FY 2004 Results	FY 2005 Targets	FY 2006 Targets
<b>Transmission System Reliability Performance:</b> Met Goal Actual: CPS1: 173.1% CPS2: 98.7%	<b>Transmission System Reliability Performance:</b> Met Goal Actual: CPS1: 197.5% CPS2: 96.8%	<b>Transmission System Reliability Performance:</b> Met Goal Actual: CPS1: 198.0% CPS2: 93.6%	<b>Transmission System Reliability Performance:</b> Met Goal Actual: CPS1: 198.5% CPS2: 94.3%	<b>Transmission System Reliability Performance:</b> Attain average NERC compliance ratings for the following NERC CPS measuring the balance between power generation and load, including support for system frequency: (1) CPS1, which measures generation/load balance on one-minute intervals (rating >=100); and (2) PCS2, which limits any imbalance magnitude to acceptable levels (rating >=90). Actual: CPS1: CPS2:	Achieve results in the top half of benchmarked utilities for reliability performance targets defined through a customer process in 2004-2005.
<b>Repayment of Federal Power Investment:</b> Met Goal (\$139 million) Actual: \$237 million	<b>Repayment of Federal Power Investment:</b> Met Goal (\$239 million) Actual: \$505 million	<b>Repayment of Federal Power Investment:</b> Met Goal (\$216 million) Actual: \$544 million	<b>Repayment of Federal Power Investment:</b> Met Goal (\$246 million) Actual: \$592 million	<b>Repayment of Federal Power Investment:</b> Meet planned annual repayment of principal on Federal power investments. Actual:	<b>Repayment of Federal Power Investment:</b> Meet planned annual repayment of principal on Federal power investments. Actual:
				<b>Hydropower Generation Efficiency Performance:</b> <i>Achieve 97% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.</i> Goal: 97% Actual:	<b>Hydropower Generation Efficiency Performance:</b> <i>Achieve 97% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.</i> Goal: Actual:



<b>Recordable Injury Frequency Rate:</b> Met Goal Actual: 2.0 injuries	<b>Recordable Injury Frequency Rate:</b> Met Goal Actual: 1.7 injuries	<b>Recordable Injury Frequency Rate:</b> Met Goal Actual: 2.6 injuries	<b>Recordable Injury Frequency Rate:</b> Met Goal Actual: 2.3 injuries.	<b>Recordable Injury Frequency Rate:</b> Achieve a safety performance of no more than 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower. Actual:	<b>Recordable Injury Frequency Rate:</b> Achieve a safety performance of no more than 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower. Actual:
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Notes:

The performance indicators above have been modified in consideration of the BPA section of the 2004 DOE Program Plan. BPA is continuing to assess target measures that achieve the best alignment with its strategic objectives.

The Hydropower Generation Efficiency Performance Target is included in this FY 2006 budget as a performance measure starting in FY 2005. Historical data for this measure includes FY 2001 Goal 97%, Actual 97%; FY 2002 Goal 100%, Actual 98%; FY 2003 Goal 97%, Actual 97%; FY 2004 Goal 97%, Actual 100%.

### **Transmission System Reliability Performance Indicator 1 (FY 2006)**

This indicator is based on the Institute of Electrical and Electronics Engineers (IEEE) standard measures of outage frequency (SAIFI) and duration (SAIDI). Control chart techniques, closely mirroring the transmission reliability methodology adopted by the California Independent System Operator, are used to establish allowable performance levels. SAIFI and SAIDI for transmission circuits, as categorized by Circuit Importance, are the adopted performance measures. Control Limits and Warning Limits are calculated based on historical circuit performance for the 10-year period FYs 1994-2003. BPA's Security Office will indicate in writing if a security breach relating to the transmission system was the cause of any involuntary curtailment of firm load or if there were no such cases. BPA is continuing to assess other potential transmission targets that achieve better alignment with strategic objectives.

Transmission performance target in 2004 and 2005 – Outage frequency and duration for key transmission circuits are within control chart limits and no involuntary curtailments of firm load occur as a result of transmission system security breach. This target was met in FY 2004.

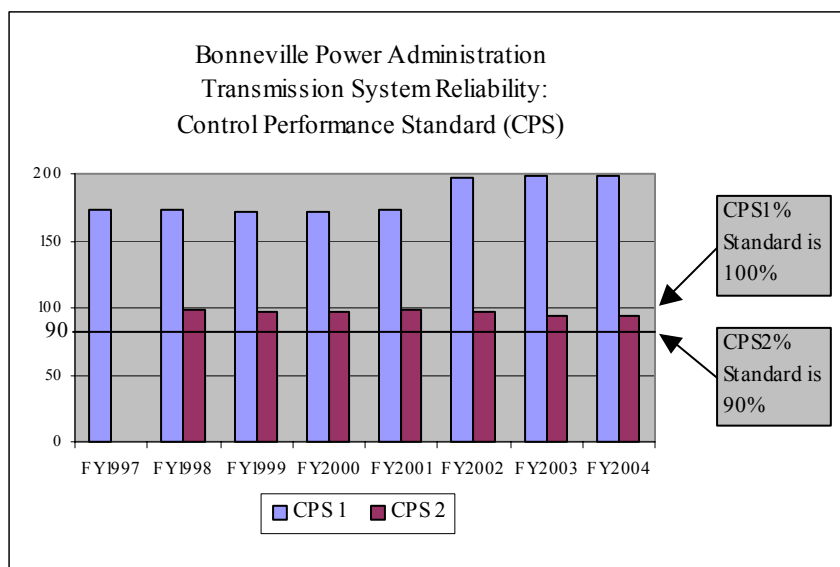
Transmission performance target, post-2005 – BPA will be in the top half of benchmarked utilities for reliability performance targets defined through a customer process in 2004-2005.

### **Transmission System Reliability Performance Indicator 2 (FYs 2001-2005)**

This indicator defines a standard of minimum monthly control performance as established by the North American Electric Reliability Council (NERC). Each control area is to have the best operation above the minimum monthly control compliance ratings that can be achieved within the bounds of reasonable economic and physical limitations. Each control area shall monitor its control performance on a continuous basis against two standards, Control Performance standards (CPS) 1 and 2.

CPS1 and CPS2 are the performance rating indicators that U.S. and Canadian electric utilities have developed to help assure the reliability of the North American high voltage distribution system for the benefit of the public. These measurers are intended to indicate whether or not electric utility systems are being operated within acceptable operating parameters. CPS1 helps assure generation and load balance and also measures support system frequency. CPS2 helps limit any imbalance magnitude to acceptable levels.

Target in FY 2005: Attain average NERC compliance ratings for the following NERC CPS measuring the balance between power generation and load, including support for system frequency: (1) CPS1, which measures generation/load balance on one-minute intervals (rating  $\geq 100$ ); and (2) PCS2, which limits any imbalance magnitude to acceptable levels (rating  $\geq 90$ ).



## Repayment of Federal Power Investment Performance Indicator

This indicator measures the variance of actual from planned principal payments to the U.S. Treasury (Treasury).

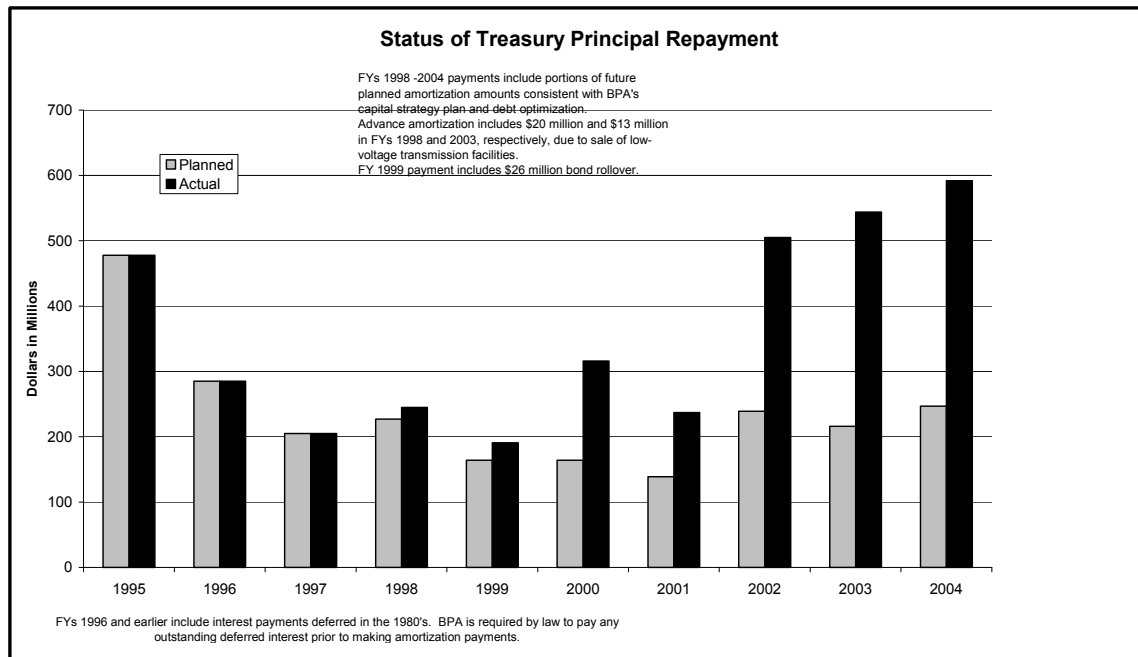
Treasury payment outyear estimates for planned amortization or principal are based on rate case estimates when available and planned amortization for future rate case periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and advanced amortization payments. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings, resulting in a balance of advance repayment. Bonneville made its full planned FY 2004 payment of \$1,049 million to the Treasury, including \$346 million in advanced amortization.

Repayment target, in 2004 – Meet planned repayment of principal on Federal power investments in FY 2004.

Repayment target, in 2007 – Meet planned repayment of principal on Federal power investments in FY 2007.

Repayment target, in 2011 – Meet planned repayment of principal on Federal power investments in FY 2011.

The following chart displays principal repayment only.



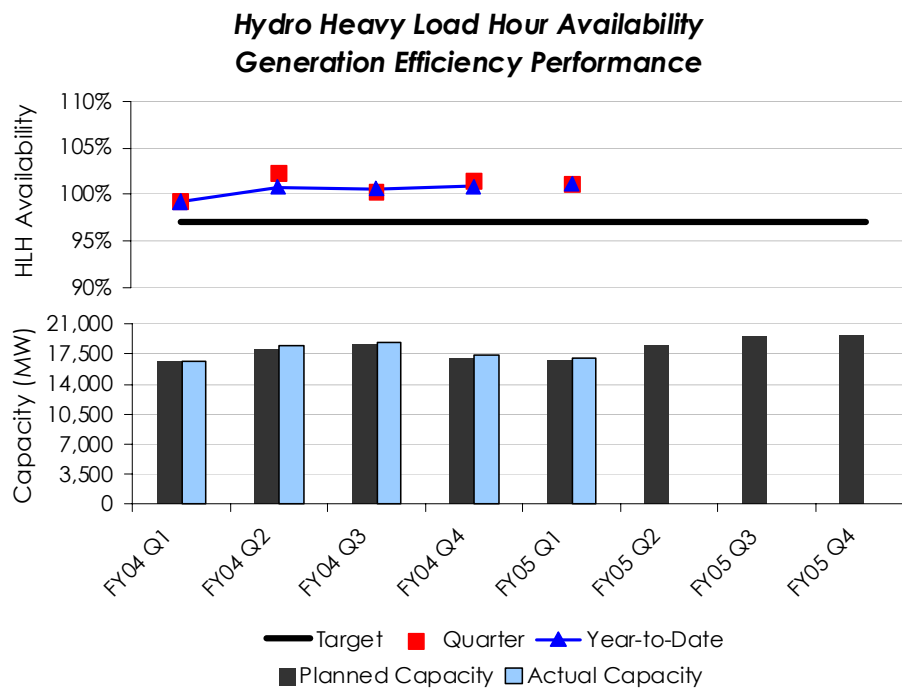
## Hydropower Generation Efficiency Performance Indicator

The fundamental programmatic role of Bonneville within the FCRPS is the marketing of electricity generated at the multi-purpose hydro projects in the Pacific Northwest owned and operated by the Corps and the Bureau. This indicator concerns the actual effective performance of the hydro system, reflecting joint work between BPA, the Corps, and the Bureau to improve performance of these generating projects when they are needed most for commercial power operation. It is important from a reliability and economic standpoint to have power generation available when loads are high.

This indicator is based on actual machine capacity available during heavy load hours (HLH), divided by planned available capacity during heavy load hours, expressed in megawatts (MW). Planned capacity is established annually through the Annual Outage planning process, and then updated quarterly based on changes in load and water forecasts. This planned capacity is the basis for the HLH target.

**Hydropower Generation Efficiency target:** Achieve actual efficiency results at or above planned availability target levels for hydropower generation efficiency.

**FY 2005:** Achieve 97% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.



As represented above, in 2004 the FCRPS hydro performance tracked closely to the HLH targets, meeting the targets in all four quarters.

### Recordable Injury Frequency Rate Performance Indicator

This indicator measures the recordable accident frequency rate by first multiplying the number of recordable injuries by 200,000. This number is then divided by the total hours worked. The Power Marketing Administrations measure their performance against a Bureau of Labor and Statistics standard industry case rate.

The national average recordable injury frequency rate is based on standards established by the Bureau of Labor and Statistics. The Bureau of Labor's data is collected from organizations representing the private sector in the generation, transmission, and distribution of electric energy. The Bureau of Labor and Statistics includes a 2003 national average recordable injury frequency rate of 4.1 injuries per 200,000 hours worked. Bonneville's recordable injury frequency rate for FY 2004 was 2.3 injuries. The Bonneville target for FYs 2004 and 2005 is to achieve a safety performance of no more than a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower.

### Means and Strategies

Bonneville provides electric power, transmission, and energy services while supporting the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power in the Pacific Northwest.

To improve system adequacy, reliability and availability, BPA has embarked on major transmission infrastructure projects to shore up the region's transmission system and to help meet the region's future power needs. These projects are meant to address multiple challenges, such as the need to relieve the growing number of congested transmission paths, the pressure to keep up with growing energy demands, and the need to meet FERC's open access policy in support of competitive markets.

BPA's strategic direction and balanced scorecard establish a key objective of meeting electricity availability, adequacy, reliability, and cost-effectiveness standards through performance and expansion of the transmission system. To that end, in 2004 BPA managed nine critical transmission infrastructure projects achieving all project milestones on schedule and coming under budget at \$154 million, \$13 million less than the \$167 million threshold. In 2005, BPA is continuing its efforts with 13 key projects and a not-to-exceed budget of \$108 million. Performance is being monitored continuously and reported monthly. For 2006 BPA's total capital budget includes \$414 million for transmission (main grid additions, upgrades and additions, system replacements, area and customer services, and projects funded in advance), from which a set of critical transmission infrastructure projects will be selected. These investments - repaid entirely by BPA's customers - are foundational to BPA's transmission performance.

As part of these initiatives, Bonneville is also working to improve efficiencies and initiate further cost reductions. Bonneville coordinates its power operational activities with the Corps, the Bureau, the NERC, regional electric reliability councils, its customers, and other stakeholders to provide the most efficient use of Federal assets. Ongoing work with the Corps and Bureau is focused on improving the reliability of the FCRPS, increasing its generation efficiency and optimization of hydro facility operation.

In addition, Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. BPA works closely with the Council, regional fisheries managers, the U.S. Fish and Wildlife Service (USFWS), the Corps and Bureau, as well as other Federal agencies to prioritize and manage fish and wildlife program projects.

Bonneville initiatives are impacted by external factors such as continually changing economic and institutional conditions in the electric utility industry, competitive dynamics, and the continued restructuring of the electric industry.

Private and public sector partners have been and continue to be an important part of BPA's collaborative efforts to promote and foster efficient use of energy. BPA has initiated efforts to explore non-federal financial participation in its transmission infrastructure projects with transmission customers and others in the region. In addition, BPA's Conservation Augmentation and other programs offer several ways for customers to participate in regional conservation.

## **Validation and Verification**

To validate and verify program performance, Bonneville conducts various internal and external reviews and audits. Bonneville's programmatic activities are subject to review by Congress, the General Accountability Office (GAO), the Department's Inspector General, and other

governmental entities. Bonneville accounts are reviewed annually by an independent outside auditor. In addition, BPA uses Institute of Electrical and Electronics Engineers standard measures to monitor and evaluate system reliability performance, and participates yearly in an independent reliability benchmarking study.

### **Program Assessment Rating Tool (PART)**

The DOE implemented a tool to evaluate selected programs. PART was developed by the Office of Management and Budget (OMB) to provide a standardized way to assess the effectiveness of the Federal government's portfolio of programs. The structured framework of the PART provides a means through which programs can assess their activities differently than through traditional reviews.

The current focus is to establish outcome- and output-oriented goals, the successful completion of which will lead to benefits to the public, such as increased national security and energy security, and improved environmental conditions. BPA has incorporated feedback from OMB into the FY 2006 budget submission, and will take the necessary steps to continue to improve performance.

In the 2004 PART review by OMB, Bonneville received high scores of 89 and 100 in the Planning and Management sections. These high scores reflect Bonneville's strong program management system and internal and external program and management reviews. Bonneville's somewhat lower scores in the Purpose and Results sections were attributed in part to its rate setting processes and the need for improved performance measures. Enactment of the BPA rate with the Safety Net Cost Recovery Adjustment is an example of how BPA is working to continuously improve its rates processes and utilize rate setting as a tool to protect the taxpayer's investment in the FCRPS. This rate adjustment helped BPA establish its rates with a Treasury payment probability at a targeted 80 percent for the FY 2004-2006 period. Additionally, BPA's FY 2004 Treasury payment marks the 21st year that BPA has made its payment on time and in full.

Regarding PART feedback on performance measurement, BPA has recently re-examined its overall strategic vision and associated performance measures, enhancing the linkage between its financial performance and strategy. BPA's long-term agency objectives are presented through a strategy map that expresses a direct link of overall agency direction to the objectives and targets of internal organizations. Managers' performance contracts also relate directly to organization and agency targets. In addition, BPA is looking to examine industry benchmarking techniques associated with performance and is continuing to develop associated efficiency measures and targets, both short- and long term.

With respect to the marketing and cost recovery findings, BPA continues to implement recommendations from its internal Lessons Learned Report to the Administrator, as well as a similar BPA Report to the Region that assessed BPA's recent financial challenges and included recommendations in part to assure cost recovery and added efficiencies. Additionally, BPA is improving its management of capital project costs and capital investment assessments while helping to assure long-term availability of needed capital funds.

## **Significant Program Shifts**

This section provides an introduction to Bonneville operations and statutory authorities followed by a description of significant Bonneville program shifts.

Bonneville is the DOE's electric Power Marketing Administration for the FCRPS. Bonneville provides electric power, transmission, and energy efficiency throughout the Pacific Northwest. Created in 1937 to market and transmit the power produced by the Bonneville Dam on the Columbia River, Congress has since directed Bonneville to sell at wholesale the electrical power produced from 31 operating Federal hydro projects and to acquire non-Federal power and conservation resources sufficient to meet the needs of Bonneville's customer utilities. Bonneville also owns and operates over 15,000 miles of high-voltage transmission lines, transmitting power from the dams and regional power on an open-access non-discriminatory basis. Bonneville serves a 300,000 square mile area including Oregon, Washington, Idaho, Western Montana, and parts of Northern California, Nevada, Utah, and Wyoming.

The Bonneville Project Act of 1937 provided the foundation for Bonneville's statutory utility responsibilities and authorities. In 1974, passage of the Federal Columbia River Transmission System Act (Transmission System Act) placed Bonneville under provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110). The Legislation provided Bonneville with "self-financing" authority and established the Bonneville Fund, a revolving fund, allowing Bonneville to use its revenues from electric power and transmission ratepayers to directly fund all programs and to sell bonds to the Treasury to finance the region's high-voltage electric transmission system requirements. In 1980, enactment of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) expanded Bonneville's utility obligations and responsibilities to encourage electric energy conservation; develop renewable energy resources; and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these responsibilities, Bonneville's Treasury borrowing authority was expanded to allow the sale of bonds to finance conservation and other resources and to carry out fish and wildlife capital improvements. The Northwest Power Act also required regional energy plans and programs and created the Pacific Northwest Electric Power and Conservation Planning Council, now commonly called the Northwest Power and Conservation Council.

Bonneville's program is treated as mandatory and nondiscretionary. As such, Bonneville is "self-financed" by the ratepayers of the Pacific Northwest and receives no annual appropriations from Congress. Under the Transmission System Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric power and transmission rates. Bonneville's revenues fluctuate primarily in response to market prices for fuels and stream flow variations in the Columbia River System due to weather conditions and fish recovery needs. Bonneville's permanent, indefinite statutory borrowing authority authorizes the agency to sell bonds to the Treasury up to a cumulative outstanding total of \$4.45 billion. Through FY 2004, Bonneville has returned approximately \$20.5 billion to the Treasury for payment of FCRPS O&M and other costs (about \$2.9 billion), interest (about \$11.0 billion), and amortization (about \$7.0 billion) of appropriations and bonds. Bonneville made its full planned FY 2004 payment of \$1,049 million to the Treasury, including \$346 million in advanced amortization. Total FY 2004 credits applied for fish mitigation were about \$83 million. For FY 2005, Bonneville plans to pay the Treasury \$775



million: \$303 million to repay investment principal, \$445 million for interest, \$27 million for Pension and Post-retirement Benefits. FY 2005 and FY 2006 4(h)(10)(C) credits are estimated at \$79 million annually. The FY 2006 Treasury payment is currently estimated at \$848 million.

Estimates of interest levels for outyear Treasury payments are based on rate case estimates as updated for revised capital investment plans. Amortization is based on rate case estimates when available and planned amortization for future rate case periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and advanced amortization payments. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings resulting in a balance of advance repayment. The cumulative amount of advance amortization payments as of the end of FY 2004 is about \$1,146 million.

Starting in FY 1997, Bonneville began direct funding the Bureau's Pacific Northwest power O&M costs and in FY 1999 began direct funding Corps Pacific Northwest power O&M costs. Bonneville began direct funding the USFWS in FY 2001 to pay for O&M costs of the Lower Snake River Compensation Plan facilities. Bonneville's direct funding arrangement includes a portion of power O&M capital investments, and Bonneville also plans to direct fund Bureau hydropower research expenses of benefit to the FCRPS. Direct funded capital costs, previously funded through appropriations, are now being paid through BPA borrowing from the Treasury. BPA's total O&M direct funding was \$214 million in FY 2004.

This FY 2006 budget proposes Bonneville accrued expenditures of \$2,977 million for operating expenses, \$147 million for Projects Funded in Advance, \$487 million for capital investments, and \$372 million for capital transfers in FY 2006. The budget has been prepared on the basis of Bonneville's major areas of activity, Power and Transmission. This business structure arose as a response to the 1992 Energy Policy Act and ensuing FERC Orders 888 and 889 requiring separation of utilities' power and transmission functions. As a Federal agency, Bonneville is not subject to FERC's jurisdiction, but chooses to voluntarily comply with the FERC orders. Further, Bonneville supports DOE's October 1995 "Power Marketing Administration Open Access Policy which states the Power Marketing Administrations' commitment to offer transmission services to eligible entities in a manner comparable to the services offered by FERC-jurisdictional transmission providers to the extent not otherwise inconsistent with federal law.

Spending levels in this budget are still subject to change to accommodate competitive dynamics in the region's energy markets, debt optimization strategies, and the continued restructuring of the electric industry.

- Bonneville's FY 2006 budget reflects the significant financial and business events that have shaped Bonneville's response to the physical and competitive pressures of the region's electricity situation. BPA is striving to enhance its competitive, cost-effective delivery of utility products and services and continued delivery of the public benefits of its operations, while ensuring its ability to make its payments to the Treasury on time and in full. BPA underwent a comprehensive strategic planning process using the Balance

Scorecard model to align all business units around specific goals and align resources to achieve these goals. In support of strengthening its strategic alignment, BPA is also seeking to achieve operational efficiencies through a stronger overall agency perspective while still complying with the FERC Standards of Conduct.

- The past several years have been particularly challenging for BPA responding to the 2000-2001 West Coast power crisis. Drought and the resulting poor hydrological conditions contributed to a significant decline in expected revenues and high market prices for power purchases required to meet load obligations created significant cost increases. Since then, continued below average hydrological conditions have put pressure on BPA's financial condition. BPA's priority has been to restore its financial health and look toward a stronger financial future. Aggressive cost reductions, debt optimization efforts, cost recovery rate adjustments, and improved market conditions have all contributed to help stabilize Bonneville's finances. BPA is continuing its efforts to assure full recovery of its costs by the end of the rate period in FY 2006 and to achieve long-term financial stability while meeting its overall responsibilities to the Pacific Northwest and the U.S. taxpayer.
- When BPA set power rates for the FY 2002-2006 rate period, it incorporated a series of cost recovery adjustment clauses (CRACs) into its rates structure to provide flexibility to make adjustments as needed to deal with costs or financial situations not anticipated when setting the base rate. Since then, BPA has instituted several actions to reduce costs, thereby keeping power rates as low as possible over the rate period.
- As reflected in this FY 2006 budget, about \$550 million in actual and forecasted program and internal operations expense reductions and revenue enhancements for the power function are being implemented over the FY 2003-2006 power rate period, compared to when rates were set. Of this amount, about \$100 million was identified by the Power Net Revenue Improvement Sounding Board, composed of customers and other regional stakeholders working with BPA. BPA is continuing its efforts to reduce costs and enhance revenues. Through its significant cost reductions and deferrals since the beginning of FY 2003, coupled with the implementation of the cost recovery rate adjustments, Bonneville has retained a high probability of making its Treasury payment throughout the remaining FYs 2005-2006 of the rate period.
- BPA, in September 2004, announced a wholesale power rate decrease of 7.5 percent for FY 2005 relative to FY 2004 rates. The rate decrease is the first since the West Coast energy crisis and Northwest drought of 2000-2001 drove rates up starting in FY 2002. The rate reduction is made possible by continued cost reductions and a positive outlook for surplus sales revenues. BPA initiated a public process in January 2005 called the Power Function Review (PFR) that will address power program levels for the FY 2007-2011 period. Results from this process will provide important direction for the initial rate proposal that takes affect FY 2006.
- BPA is engaging its customers, constituents and employees in discussions on the agency's power supply role through the Regional Dialogue public process. A key goal of this process is to gain clarity regarding BPA's load obligations and those of the region's utilities. As part of this process, BPA issued in July, 2004 a draft Regional Dialogue

Policy Proposal for Power Supply Role for FYs 2007-2011 for public review and comment. This draft policy is consistent with many of the recommendations included in a recent GAO report on BPA entitled “Better Management of BPA’s Obligation to Provide Power is Needed to Control Future Costs.” BPA is targeting to complete final policy decisions and a Record of Decision covering short-term issues in the Regional Dialogue in early 2005, followed by additional consideration of remaining long-term issues.

- For the transmission function, BPA established transmission and ancillary service rates for the FY 2004-2005 rate period, with the two-year timeframe designed to mitigate the risks related to an unstable marketplace and in part to support the transition toward formation of a Regional Transmission Organization (RTO). The Federal Energy Regulatory Commission (FERC) granted final approval of BPA’s proposed FY 2004-2005 transmission rates and tariffs on September 23, 2003. These rates are consistent with an earlier settlement agreement reached with most of BPA’s customers providing for a 1.5 percent increase for most transmission and ancillary service rates over the rate period.
- In anticipation of establishing transmission rates for the FY 2006-2007 period, BPA initiated Programs in Review (PIR), a public process with customers, constituents and others designed to share proposed transmission program funding levels. The PIR includes an overview of the Transmission Business Line’s (TBL) vision and objectives which include: providing open and nondiscriminatory transmission access, maintaining system reliability for an improving economy, providing low-cost transmission to the Northwest, increased accountability to customers and constituents, and heightened environmental consciousness.
- Results from the PIR process served as the basis for development of costs in BPA’s Initial Proposal for transmission rates that was included in a Settlement Agreement signed by BPA on January 11, 2005 and over 120 BPA customers and other parties. Terms of the agreement entail an overall 12.5 percent increase for the FY 2006-2007 rate period. The increase is driven primarily by a significant drop in TBL’s revenues combined with increased costs associated with completion of major infrastructure projects to improve system reliability. Under the Settlement Agreement, BPA commits to proposing in the 2006-2007 Transmission Rate Case the Initial Proposal reflected in the Settlement Agreement. BPA intends to start the formal transmission rate case with a Federal Register Notice expected to be published in February 2005.
- The TBL funding levels included in this FY 2006 budget are based on initial PIR funding estimates. The TBL is continuing to identify added efficiencies, defer work, and cut program costs to help keep transmission rates low.
- Bonneville is continuing efforts to help meet the region’s long-term power and transmission infrastructure needs. Bonneville is planning infrastructure investments in the Pacific Northwest to meet Northwest transmission needs that will also continue to support a competitive wholesale market in the Western Interconnection that encompasses 15 western States, two Canadian provinces and two Mexican States. As part of those efforts, BPA passed a major milestone in its infrastructure program when it energized the Kangley-Echo Lake 500-kilovolt transmission line in December 2003. Another critical component

of the program, the Celilo modernization project, was completed in April 2004, and will maintain the transmission line capacity of the 846-mile Pacific DC Intertie running from Los Angeles, California, to the northern Oregon border.

- Bonneville has identified a number of actions that it is taking or could take over the next several years to provide additional electric system infrastructure relief. These actions include federal hydro generation efficiencies and additions, additional renewable resource generation and conservation efforts, long- and short-term power purchases, and construction of transmission projects that reinforce the grid and integrate new generation. As part of these efforts, Bonneville has designed a process to review and prioritize the transmission investments. Part of this process, developed with stakeholder input, will provide investor owned utilities (IOUs) and public utilities an opportunity to evaluate proposed major transmission infrastructure additions for their cost, benefits, and their contribution to reliability, as well as schedules for project completions. Bonneville has moved this process to the Transmission Planning Committee of the Northwest Power Pool, which will provide a broader review of any proposed infrastructure project. Bonneville will also engage DOE and other regional stakeholders in discussions to clarify needed generation improvements and conservation.
- Bonneville received an additional \$700 million in available Treasury financing through the FY 2003 Appropriations Act to help assure a sufficient level of infrastructure planning. For efficient use of this newly available Treasury financing, BPA will encourage private-sector or other non-federal financing or joint financing of transmission line expansions and additions, develop a five-year investment plan with the participation of the regional Infrastructure Technical Review Committee or its successor in the region, continue to use funds only for authorized purposes, continue to include the proposed use of the funds in its annual budget submissions and select projects based on cost-effectiveness criteria for achieving the objective. The new law increases to \$4.45 billion the aggregate amount of bonds Bonneville is authorized to sell to the Treasury and have outstanding at any one time. Bonneville is pursuing other strategies to sustain funding for its infrastructure investment requirements as well. These additional strategies include optimization of Energy Northwest (ENW) debt, revenue financing of some amount of transmission investments, and seeking, when possible, third party financing sources. This FY 2006 budget includes \$15 million of revenue financing in FYs 2004 and 2005 for transmission infrastructure capital- projects funded in advance.
- Bonneville is continuing efforts to explore non-federal funding in its transmission infrastructure projects with transmission customers and others in the region. This effort has been designed to obtain as much interest as possible in cost effective and timely non-federal participation and financing of transmission infrastructure that can be operated and maintained integrally with the Federal grid. A set of principles for non-federal financial participation was developed by Bonneville and publicly announced in the Open Access Same-Time Information System (OASIS)/Federal Register postings in early 2002. That posting initiated a formal schedule for soliciting interest in non-federal participation. The schedule is sufficiently flexible to accommodate the level of interest expressed and the schedule of individual transmission projects. Furthermore, Bonneville assumes that transmission additions for the purpose of generation integration will go forward with funds

provided by generators up front, to be amortized through credits for transmission services as FERC has encouraged.

- Construction of the Schultz-Wautoma-500 kV transmission infrastructure project was financed in part through a lease-purchase agreement with Northwest Infrastructure Financing Corp., a subsidiary of JH Management. The Schultz-Wautoma project is one of the top projects in BPA's transmission infrastructure program and will add transmission capacity and greatly ease congestion on related transmission paths. The line will increase reliability, potentially reducing outages, while allowing approximately 600 megawatts of new capacity for power flowing in the North to South corridors.
- This FY 2006 budget includes capital and expense estimates for the PBL based on updated estimates from the 2005 Safety Net CRAC rate proposal. The outyear power estimates included in this budget serve as the basis for program levels included in the PFR public process initiated in January 2005. The TBL capital and expense estimates are based on initial TBL PIR funding estimates. Capital investment levels also reflect executive management decisions from BPA's cross-agency Business Operations Board review process, and external factors such as the significant changes affecting the West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region. FY 2004 cost estimates are based on BPA's audited actual financial results.
- FYs 2005-2010 revenue estimates in this budget, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools; for example, upcoming CRAC adjustments, reduced cost estimates, a net revenue risk adjustment, debt service refinancing strategies, and/or short-term financial tools to manage net revenues and cash. FY 2004 revenue estimates are based on BPA's audited actual financial results.
- Revenue calculations include depreciation and 4(h)(10)(C) assumptions. These credits offset BPA's fish and wildlife program costs allocable to the non-power project purposes of the FCRPS, consistent with the Northwest Power Act. Credits for 4(h)(10)(C) included in this FY 2006 budget are \$83 million for FY 2004, and \$79 million for FYs 2005 and 2006. Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses.
- Bonneville is continuing to work closely with the region's IOUs, Bonneville's public agency customers and other stakeholders through a public collaborative process called the Regional Representatives Group (RRG) to further develop a grid management proposal that addresses the specific needs and opportunities of the Pacific Northwest. At the core of the proposal is a flexible business model providing for a staged, voluntary implementation process and a governance structure that provides for a set of checks and balances to ensure that the region has a hand in shaping how the entity serves the region's needs. A preliminary step has been taken by the restructuring of the earlier RTO West proposal into the Grid West proposal and adoption of the Grid West Developmental Bylaws.

- Estimates included in this FY 2006 budget anticipate a slight increase in near-term funding requirements that follows the adoption of the Grid West Developmental Bylaws. If BPA subsequently elects to fund its share of further developmental costs to be incurred by an independent Grid West board, BPA estimates costs for implementation of Grid West could range as high as \$10 million annually.
- Bonneville's efforts to keep its rates as low as possible are augmented by the implementation of the Bonneville Appropriations Refinancing Act (part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996) that refinanced Bonneville's outstanding repayment obligations on appropriations. The legislation called for raising low interest rates on historic appropriations to current Treasury market rates and resetting the principal of unpaid FCRPS appropriations. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the refinancing to the Treasury. The Treasury then approved the BPA submission in July 1997, thus finalizing the implementation of the Bonneville Appropriations Refinancing Act.
- Consistent with assumptions in its 2002 Supplemental Power Rate Proposal and this FY 2006 budget, Bonneville has reached a settlement of the Residential Exchange Program for regional utilities for the post-2001 period. Regional utilities were eligible to participate in the Residential Exchange Program beginning in 2001, except for the nine public agency utilities that previously executed settlement agreements for terms extending through June 30, 2011. To settle the Residential Exchange, IOU customers will receive 1,900 average MW (aMW) in power and financial benefits, at prices generally equivalent to the priority firm power rate, over the FY 2002-2006 rate period. In FY 2007, the total amount of settlement benefits changes to 2,200 aMW, which will be provided entirely as financial benefits consistent with new IOU contracts signed in May 2004. No settlement offer was made to Bonneville's preference customers or public agency utilities, because none had forecasted average system costs that were sufficiently high to qualify for Residential Exchange benefits. See the Operating Expenses- Power Business Line section for additional discussion of the settlement agreements.
- In April 2003, Bonneville entered into a settlement agreement with Enron Corporation (Enron) relating to its associated power sales and purchase agreements. This agreement followed Enron's filing for bankruptcy protection in December 2001, and was approved in advance by the Enron Bankruptcy Court, the U.S. District Court for the Southern District of New York, in March 2003. Under the settlement, a \$99 million payment to Enron was paid directly from the Treasury's judgment fund in June 2003. The agreement calls for Bonneville to fully reimburse the Treasury by the end of December 2006, for the judgment funds used plus interest. Consistent with a Memorandum of Understanding with the Treasury, Bonneville makes interest payments on the outstanding debt to the Treasury's "miscellaneous receipts" account.
- As part of its continuing competitive efforts, Bonneville is working to further optimize debt service costs (often referred to as debt optimization elsewhere in this budget). Bonneville has reached agreement with ENW to pursue refinancing of certain ENW bonds. Bonneville pays the debt service on these bonds under the terms of earlier net billing

agreements. A component of the refinancing strategy is to extend the final maturity on the Columbia Generating Station (formerly WNP-2) debt. In addition, for Projects 1 and 3, some debt currently maturing prior to FY 2012 is being extended into the 2013-2018 time period. Bonneville has committed to ENW to use the reductions in debt service resulting from this extension to amortize Federal debt earlier than currently scheduled, except in the case of an extreme financial emergency. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment.

- As part of its strategic staffing efforts and infrastructure project requirements, Bonneville has seen an increase in Full-Time Employee (FTE) levels since FY 2000. Due to cost management initiatives, BPA is currently assessing its FTE estimates and expects reductions in actual FTE levels that are planned to occur through attrition and as part of efforts to reduce costs to assure Bonneville's continued financial health. BPA is currently in the process of seeking authority to offer a voluntary separation incentive (VSI) and voluntary early retirement authority (VERA) in FY 2005. Annual Bonneville FTE projections included in this FY 2006 budget for FYs 2005 and 2006 are 3,166.
- Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. In its 2002 Power Rate Proposal for FYs 2002-2006, Bonneville incorporated fish and wildlife funding principles that were developed and supported by a broad base of regional interests. Consistent with these principles, power rates were set to provide sufficient revenue to satisfy Bonneville's fish and wildlife responsibilities. Bonneville is working closely with the Council, regional fisheries managers, National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries), the USFWS, Corps, Bureau, and other Federal agencies to prioritize and manage fish and wildlife costs to remain within the funding estimates established in rates. Included with the budget schedules section of this budget document is the current tabulation of Bonneville's fish and wildlife costs from FY 1996 through 2003.
- To the extent possible, Bonneville is integrating its implementation of Endangered Species Act (ESA) actions with the Council's Fish and Wildlife Program. Many of the actions in the FCRPS Biological Opinions and the Council's Program overlap, particularly in the areas of habitat and hatchery offsite mitigation measures. The FCRPS Action Agencies' (Corps, Bureau, and Bonneville) Biological Opinion Implementation Plans describe an approach that maximizes the use of the Council's regional processes to identify and select projects that avoid jeopardizing the survival of the ESA-listed species and to protect, mitigate and enhance all fish and wildlife; both listed and non-listed affected by the operation of the FCRPS. The Council's Fish and Wildlife Program, provides the mechanism for integrating activities focused on ESA-listed fish in the NOAA Fisheries 2004 and USFWS 2000 Biological Opinions (FCRPS Biological Opinions) with those for non-listed species affected by the Columbia Basin's federal and non-federal hydrosystems).
- Bonneville and the other FCRPS Action Agencies will continue to prioritize funding for fish and wildlife projects, including biological opinion implementation, and will focus funding on cost-effective projects. General and specific criteria, including factors for

selecting projects focused on targeted stocks, will be further refined as Bonneville and the region gain experience with adaptive management.

- Bonneville is also relying on the Council's recently submitted Sub-basin Plans for the entire Columbia River Basin to further integrate needs identified through recovery planning with those of the Council's Fish and Wildlife Program and FCRPS Biological Opinion implementation. The plans will be developed in close coordination with NOAA Fisheries and the USFWS to ensure the integration and prioritization of ESA-focused project activities in the Council's Fish and Wildlife Program.
- The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel "to review projects proposed to be funded through that portion of Bonneville Power Administration's fish and wildlife budget that implements the Council's fish and wildlife program." And, "... in making its recommendations to Bonneville, the Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." Consequently, projects funded under Bonneville's direct program will be reviewed and prioritized as part of the Council initiative process.

### **President's Management Agenda**

- In the area of the President's Management Agenda, Bonneville is leveraging the President's initiatives to achieve efficiencies while preserving the long-term value of the FCRPS. To ensure that Bonneville is able to fully leverage the initiatives, Bonneville has incorporated a matrix team approach utilizing the OMB and Office of Personnel Management (OPM) "Proud to Be" standards and is continuing to develop strategies to achieve greater efficiencies in Bonneville programs and operations. In 2004, BPA was rated "green" on its performance of each annual target associated with the DOE Energy General Goal.
- Bonneville is self-reporting its Current Status as "green" or successful on both the Financial Management and the Integrating Budget and Performance initiatives. Over the past several years, Bonneville has streamlined and integrated its strategic planning and budgeting processes, setting quantifiable outcome goals and targets, aligning its resource allocations in the context of past results, and implementing the Balanced Scorecard concept of performance management. As part of this year's budget development, BPA has initiated a "full-cycle financial management" process where the agency's strategic direction drives the development of performance targets that in turn are reflected in outyear budget estimates, BPA's long-term rate development process, and individual managerial performance contracts.

Bonneville has received a Clean Audit Opinion since the mid-1980s and has no material financial weaknesses reported on its financial statements. Bonneville planning and budgeting processes include extensive Bonneville stakeholder involvement, including customers, constituents, tribal and other interested parties in the region. Bonneville's financial management systems and reporting procedures meet Federal standards, comply



with Generally Accepted Accounting Principles (GAAP), and are consistent with Presidential Initiative schedule guidance.

Bonneville, along with the Corps and Bureau, has developed an asset management strategy to improve the performance and efficiency of FCRPS assets. This strategy evolved into a comprehensive integrated business management model, which dovetails with the President's Budget and Performance initiative. While each agency has its own distinct identity and mission, much greater effort is being made to plan and manage the system collectively and to share strategic objectives. The process involves a continuous loop that integrates planning and resource management with results, while helping to instill greater cooperation among the FCRPS agencies.

- In the area of Expanding E-Government, Bonneville is self-reporting its Current Status as “green” and its Progress Toward Implementing the President’s Management Agenda as “green.” In an effort to close the gap in the standard of IT (Information Technology) program management (90 percent of IT projects completed on time and on budget), Bonneville has also completed an IT Leading Change effort (IT Process Re-engineering Study) and is now implementing a standard IT project management approach, increased rigor for approving and funding IT projects, as well as enhanced IT documentation and reporting processes. Bonneville exceeds OMB standards for IT business case preparation and for providing web access that improves citizen access by offering one-stop shopping through integrated delivery methods, while reducing undue burden on our business partners and customers by reducing or eliminating the need to re-key data. Bonneville has developed an Enterprise Resource Planning system that integrates its major business process, providing its managers and employees with access to timely and accurate financial, personnel, and property reports. In a move to further reduce operations cost, Bonneville has consolidated its business and administrative IT groups.
- Bonneville is self-reporting “green” in Current Status and “green” in Progress Toward Implementing the President’s Management Agenda in the area of Human Capital. This initiative has served as a catalyst in redefining BPA’s organizational strategy, in developing and getting alignment with meaningful objectives, and in assigning clear accountabilities. A Workforce Plan, completed in early 2004, sets forth BPA’s strategy for achieving these goals. The Human Capital Initiative also underscores BPA’s efforts toward creating a culture and workforce capability that ensure its ability to successfully achieve its mission. Through its Performance Management systems, as an example, Bonneville aligned Agency Strategic Business Objectives with quantifiable targets that are embedded in individual executive and managerial performance contracts. Development of a new Human Resource Management Information System tool that will support organizational development plans focused on closing mission critical skills gaps is underway as well.

In support of these efforts, BPA is also beginning implementation of its “position management” initiative that will evaluate the structuring of positions, functions, and organizations in a manner that optimizes productivity, efficiency, and organizational effectiveness. Strong position management will help ensure the efficient distribution of staff resources and help in identifying, preventing, and eliminating unnecessary

organizational fragmentation. Implementation of this long-term program will utilize position management targets.

## **Overview of Detailed Justifications**

Bonneville's Detailed Justification Summaries, included in this FY 2006 budget, follow present budget requirements for budget line items on the basis of accrued expenditures. Accrued expenditure is the basis of presenting Bonneville's program funding levels in the power and transmission rate making processes, and the basis upon which Bonneville managers control their resources to provide products and services. Accrued expenditures relate period costs to period performance. Traditional budget obligation requirements for Bonneville's budget are shown on the Program and Financing Summary Schedule prepared in accord with OMB Circular A-11.

The organization of BPA's FY 2006 budget and these performance summaries reflect Bonneville's business line basis for utility enterprise activities. Bonneville's major areas of activity on a consolidated budget and accounting basis include Power and Transmission with administrative costs included. The PBL includes line items for Fish and Wildlife, Conservation and Energy Efficiency, Residential Exchange, Associated Projects O&M Costs, and Council. Environmental activities are shown in the relevant business line, and in accord with OMB Circular A-11 guidance for revolving funds, reimbursable costs are incorporated within the associated business lines. All programs funded in advance are assumed to be fully funded by benefiting entities. Bonneville's interest expenses, pension and post-retirement benefits, and capital transfers to the Treasury are shown by program.

The first section of performance summaries, Capital Investments, includes accrued expenditures for investments in electric utility and general plant associated with the FCRPS generation and transmission services, conservation and energy efficiency services, fish and wildlife, and capital equipment. These capital investments will require budget obligations and use of existing borrowing authority of \$487 million in FY 2006.

The near-term forecasted capital funding levels have undergone an extensive internal review as a result of BPA's capital budgeting process and its associated capital asset management strategy. These capital reviews encompass project cost management initiatives, capital investment assessments, and prioritization of capital projects to be funded based on risk and other factors. Consistent with BPA's near-term capital funding review process, this FY 2006 budget includes updated capital funding levels for FY 2005. Utilizing this review process helps Bonneville in its efforts to compete in the deregulated energy market. Bonneville will continue to work with the Corps and the Bureau to optimize the best mix of projects.

In addition to its extensive internal management assessment of capital investments, Bonneville has developed and is implementing an associated external capital investment review process that provides significant benefits to Bonneville. The combined internal and external processes add value by both improving direction on what the FCRPS invests in (tying investments more closely to agency strategy) and by improving how those investments are made (better analysis and review of capital investments and their alternatives). BPA will continue its efforts to refine and further implement its capital investment review process to improve the value provided.

Bonneville's second section of the performance summaries, entitled Annual Operating Expenses, includes accrued expenditures for business line and program activities financed by power sales revenues and transmission services revenues and projects funded in advance. For FY 2006, budget expense obligations are estimated at \$2,977 million. The total program requirements of all Bonneville programs include estimated budget obligations of \$3,611 million in FY 2006.

**Bonneville Power Administration**  
**Funding Profile by Subprogram <sup>a</sup>**  
(\$ in thousands)

	Fiscal Year				
	2004 Audited Actuals	2005 Original <sup>b</sup>	2005 Adjustments	2005 Revised <sup>b</sup>	2006 Proposed
<b>Capital Investment Obligations</b>					
Associated Project Costs <sup>c</sup>	111,319	N/A	-	131,158	119,400
Fish & Wildlife	8,514	N/A	-	36,000	36,000
Conservation & Energy Efficiency <sup>c</sup>	16,973	N/A	-	32,500	29,000
Subtotal, Power Business Line <sup>d</sup>	136,806	N/A	-	199,658	184,400
Transmission Business Line <sup>c</sup>	273,815	N/A	-	198,260	266,579
Capital Equipment & Bond Premium	28,081	N/A	-	35,022	36,491
Total, Capital Obligations <sup>c</sup>	438,702	486,900	-	432,940	487,470
<b>Expensed and Other Obligations</b>					
Expensed	2,642,075	3,149,561	-	2,946,974	2,976,655
Projects Funded in Advance	41,317	89,800	-	153,791	147,359
Misc. Accounting Adjustments	1,232,958				
Total, Obligations <sup>e</sup>	4,355,052	3,726,261	-	3,533,705	3,611,484
Capital Transfers (cash)	598,462	303,098	-	303,098	371,560
<b>BPA TOTAL</b>	<b>4,953,514</b>	<b>4,029,359</b>	<b>-</b>	<b>3,836,803</b>	<b>3,983,044</b>
Full-time Equivalents (FTEs)	3,136	3,166	-	3,166	3,166

**Public Law Authorizations include:**

Bonneville Project Act of 1937, Public Law No. 75-329, H.R. 7642  
Federal Columbia River Transmission Act of 1974, Public Law No. 93-454 S. 3362  
Regional Preference Act of 1964, Public Law No. 88-552  
Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), Public Law No. 96-501, S. 885

Note: this FY 2006 Congressional Budget- Funding Profile by Subprogram table was inadvertently not included in the President's FY 2006 budget submission to Congress.

<sup>a</sup> BPA's FY 2006 budget has been prepared in accord with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to discretionary "cap" in the BEA. These estimates support activities that are legally separate from discretionary activities and accounts. Thus, changes to BPA estimates cannot be used to affect any other budget categories such as domestic discretionary, or defense discretionary, which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a BEA "pay-as-you-go" test regarding its revision of funding estimates.

<sup>b</sup> Original estimates reflect BPA's FY 2005 Congressional Budget Submission. Revised estimates, consistent with BPA's annual near-term funding review process, provide notification to the Administration and Congress of updated capital and expense funding levels for FY 2005.

<sup>c</sup> Includes infrastructure investments designed to address the long-term needs of the Northwest and to reflect significant changes affecting BPA's power and transmission markets.

<sup>d</sup> The Power Business Line includes Fish and Wildlife, Conservation & Energy Efficiency, and Associated Project costs in the Performance Summaries.

This FY 2006 budget includes capital and expense estimates for the Power Business Line (PBL) based on updated estimates since the 2005 SN CRAC rate proposal. The outyear power estimates included in this budget were the basis for development of the Power Function Review (PFR) Public Process on program levels, initiated in January 2005. The Transmission Business Line (TBL) capital and expense estimates are based on initial TBL PIR funding estimates and were the basis for development of the FYs 2006-2007 initial transmission rates proposal. This data is consistent with BPA's full-cycle financial management approach to budgeting that links strategic direction and implementation through targets and performance measures.

Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2004 costs are based on BPA's audited actual financial results.

Misc. Acct Adjs for FY 2004 audited actual obligations consists primarily of long-term IOU exchange benefits obligations (\$1,008 million) and other long-term obligation requirements, consistent with BPA's FY 2004 Combined Schedules of Budgetary Resources.

Refer to 16 USC Chapters 12B, 12G, 12H, and BPA's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

# Power Business Line - Capital

## Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2004	FY 2005	FY 2006	\$ Change	% Change
Associated Project Costs . . . . .	111,319	131,158	119,400	-11,758	-9.0%
Fish & Wildlife . . . . .	8,514	36,000	36,000	0	0.0%
Conservation & Energy Efficiency . . .	16,973	32,500	29,000	-3,500	-10.8%
Total, Power Business Line - Capital .	136,806	199,658	184,400	-15,258	-7.6%

## Description

Associated Project Costs provide for direct funding of additions, improvements and replacements of existing Bureau, and Corps hydroelectric projects in the Pacific Northwest. The Bureau and Corps provide power production, which is marketed by Bonneville, and invest in additions, improvements, and replacements that provide for increased performance and availability of generating units.

Maintaining the availability and increasing the efficiency of the FCRPS is critical to ensuring that the region has an adequate, reliable and low-cost power system. The FCRPS represents about 80 percent of Bonneville's power supply, and is composed of 31 operating Federal hydro electric projects with over 200 generating units. These projects have an average age of over 45 years, with some that exceed 60 years of age. Through direct funding and the close cooperation of the Corps and Bureau, Bonneville uses its borrowing authority to make investments needed to restore generation availability and improve efficiency, eliminating demand on Corps and Bureau appropriations for power-related investments. Since the beginning of direct funding, Bonneville has significantly improved system performance. In 1999, at the direction of Congress, Bonneville issued a report that it soon began to implement called the "Asset Management Strategy for the FCRPS." Bonneville concluded in this report that it needed to invest nearly \$1 billion in the projects over the next 12-15 years. Without these investments that are focused on restoring and maintaining the reliability of the system history indicates that unit availability may initially decline at a rate of about 1.5 percent per year. Supplementary analyses and experience with the system have revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for this and the next several rate periods.

These planned investments, included in this FY 2006 budget funding estimates, will maintain the output of the FCRPS. Moving forward with these cost-effective opportunities to expand the generation and to preserve and enhance the capability of the

Federal system is a smart economic and environmental decision when compared to purchasing power from the market to serve Pacific Northwest electricity needs.

The Fish and Wildlife program provides for the protection, enhancement and mitigation of Columbia River Basin fish and wildlife due to losses attributed to the development and operation of hydroelectric projects on the Columbia River and its tributaries, pursuant to Section 4(h) of the Northwest Power Act. Bonneville satisfies a major portion of its fish and wildlife responsibilities and meets the Administrator's obligation under the Council's Fish and Wildlife Program.

Bonneville is also mandated to implement measures called for under the ESA. These measures are part of the biological opinions issued in November 2004 by the NOAA Fisheries and in 2000 by the USFWS to address the effects of the operation of the FCRPS on threatened and endangered salmon and steelhead and ESA-listed Kootenai River – white sturgeon and bull trout. The biological opinions require the FCRPS Action Agencies to implement actions in the Columbia River Basin that address impacts on the Federal hydrosystem on ESA-listed fish to ensure that operation of the FCRPS does not jeopardize the continued existence of listed species or adversely modify their designated critical habitat. The NOAA 2000 Biological Opinion on the FCRPS was challenged in Federal District Court and found to be legally invalid. The Court remanded it to NOAA to issue an opinion consistent with the Court's holdings. The revised opinion was issued on November 30, 2004 (NOAA Fisheries 2004 Biological Opinion). In February 2005, the FCRPS Action Agencies will publish an implementation plan for their proposed action addressed in the NOAA Fisheries 2004 Biological Opinion. The Implementation Plan, together with projects undertaken to address mitigation for non-listed species under the Northwest Power Act, and those to address requirements of the USFWS 2000 Biological Opinion form the basis for Bonneville's planned capital investment of \$36 million for FYs 2005 and 2006.

Bonneville's fish and wildlife capital program is directed at activities that increase numbers of Columbia River Basin fish and wildlife resources including projects designed to increase juvenile and adult fish passage in tributaries and at mainstream dams, and increase fish production and survival through construction of hatchery and acclimation facilities, and fish monitoring facilities. Capital project funding will focus on integrating ESA-related priorities with the Council's Fish and Wildlife Program.

The FY 1997 Energy and Water Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel "to review projects proposed to be funded through that portion of Bonneville's fish and wildlife budget that implements the Planning Council's fish and wildlife program." And, "... in making its recommendations to Bonneville, the Planning Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." The Conference Report on the FY 1999 Energy and Water Development Appropriations Act included a new assignment for the Independent Scientific Review Panel (ISRP) and the Council. The ISRP was to review the fish and wildlife projects,

programs, or measures included in Federal agency budgets that are reimbursed and/or directly funded by Bonneville and to make funding recommendations to Congress. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and provide a report to the Council by April 1 of each year. The Council, in turn, must report to Congress annually by May 15.

Consistent with the principles of the Federal Caucus' *Final Basin wide Salmon Recovery Strategy* (All-H Strategy), Bonneville is implementing much of the off site mitigation actions required by the FCRPS Biological Opinions through the Council's Fish and Wildlife Program. Under the 1980 Northwest Power Act, the Fish and Wildlife Program is tasked with protecting, mitigating and enhancing Columbia River Basin fish and wildlife affected by the development and operation of the FCRPS. The Council's Fish and Wildlife Program provides the mechanism for integrating activities focused on ESA-listed fish stocks in the NOAA Fisheries 2004 and USFWS 2000 Biological Opinions for the FCRPS with those for non-listed species affected by the Columbia Basin's federal and non-federal hydrosystems. Recently completed Sub-basin Plans that include prioritized strategies for mitigation actions will serve as the template for project selection that meet both BPA's ESA and Power Act responsibilities. Additionally, discussion of a minimum cost-sharing requirement for fish and wildlife projects funded by BPA in 2007 and beyond is occurring in currently ongoing long-term funding discussions with the Council and the regional fish and wildlife managers and Tribes.

When acquiring resources to meet planned future loads, the Northwest Power Act requires the Administrator to first consider and acquire resources through cost-effective conservation that the Administrator determines is consistent with the Northwest Power and Conservation Council's Power Plan to reduce loads. The Council's most recent Power Plan, finalized in January 2005, defines conservation as the more efficient use of electricity and recommends that the region develop 700 aMW of conservation over the next 5-years. Bonneville's share of the conservation target is 40 percent or 280 aMW. Bonneville anticipates that between 100 and 200 aMW of this amount will be acquired under its capital conservation acquisition program.

Conservation was key to the recent effort to reduce Bonneville's power delivery obligations as a way of limiting the impact of volatile and high market prices on Bonneville's rates. Conservation is an important part of Bonneville's diverse portfolio of resources that provides a reliable approach to meeting Bonneville's load obligations.

Long-term investments in energy efficiency help buffer the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future.

## Detailed Justification

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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**Associated Project Costs. . . . . 111,319    131,158    119,400**

BPA will work with both the Corps and Bureau to reach mutual agreement on those capital improvement projects that need to be budgeted and scheduled, are cost-effective and provide system or site-specific enhancements, increase system reliability, or provide generation efficiencies.

The work is focused on improving the reliability of the FCRPS, increasing its generation efficiency through turbine runner replacements and optimization of hydro facility operation, and small capital reimbursements associated with routine maintenance activities. Also, limited investments may be made in joint use facilities that are beneficial to both the FCRPS operations and to other Corps and Bureau purposes.

■ **Corps of Engineers (known projects to date):**

FY 2004: Completed work on Power System Reliability Improvements on Lower Columbia River projects and continued work on Lower Snake River projects and other selected sites. Continued refurbishment/replacement of head gates, the gantry crane and bridge crane at Bonneville Dam. Completed repair work of the fish unit generator. Continued exciter installation at Bonneville. Began rehabilitation work at Bonneville. Continued main unit and station service breaker replacements at selected projects. Continued work on oil/water separators at Lower Snake River projects. Completed work on replacing main unit annunciation and CO2 system at Chief Joseph. Continued station service transformer replacement at Chief Joseph. Completed replacement of DC power supplies at John Day and The Dalles. Continued solicitation for a new prototype turbine runner for McNary. Continued hydro optimization investigations system wide. Tested prototype replacement governors at Albeni Falls. Completed implementation of Cougar modernization. Continued exciter replacements at John Day and Willamette Valley projects. Began exciter replacements at Libby. Completed battery system upgrade at McNary. Began rehabilitation work at The Dalles. Began design, solicitation and purchase of spare or replacement transformers for several projects. Continued replacement and upgrades on protective relays and fire protection at Lower Snake River projects, plus a variety of smaller continuing or new investments and repairs for failed units.



FY 2004	FY 2005	FY 2006
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FY 2005: Complete work on Power System Reliability Improvements on Lower Snake River projects and continue work at other selected sites. Continue main unit and station service breaker replacements at selected projects. Continue work on oil/water separators at most projects. Continue hydro optimization investigations and equipment installations systemwide. Continue work on governor replacements at selected projects. Continue refurbishment/replacement of head gates and bridge crane, and complete replacement of gantry crane at Bonneville Dam. Continue rewedging at Bonneville. Complete exciter installation at Bonneville. Continue rehabilitation work at Bonneville. Begin HVAC upgrade at Bonneville. Continue turbine runner replacement and modernization at McNary. Complete exciter replacements at John Day and Willamette Valley projects. Continue exciter replacements at Libby. Continue CO2 system replacement at Chief Joseph. Complete station service transformer replacement at Chief Joseph. Continue turbine replacements at Chief Joseph. Begin crane rehabilitation at Ice Harbor. Complete purchase of replacement generator winding for Lower Granite and Detroit. Continue replacement of exciters at Lower Monumental and Lower Granite. Complete head gate rehabilitation at Ice Harbor. Complete or continue replacement and upgrades on protective relays and fire protection at Lower Snake River projects. Complete heat pump replacements at Little Goose. Continue solicitation and purchase of spare or replacement transformers for several projects. Continue intake crane rehabilitation and station service improvements at The Dalles. Continue rehabilitation work at The Dalles, plus a variety of smaller continuing or new investments and repairs to failed units.

FY 2006: Continue work on Power System Reliability Improvements at selected projects. Continue main unit and station service breaker replacements at selected projects. Continue work on oil/water separators at most projects. Continue hydro optimization investigations and equipment installations systemwide. Continue work on governor replacements at selected projects. Continue refurbishment/replacement of head gates and bridge crane at Bonneville Dam. Complete rewedging at Bonneville. Continue rehabilitation work at Bonneville. Continue HVAC upgrade at Bonneville. Continue turbine runner replacement and modernization at McNary. Continue exciter replacements at Libby. Complete CO2 system installation at Chief Joseph. Begin work on the 480-volt distribution system and supervisory control consoles replacements at Chief Joseph. Continue turbine replacements at Chief Joseph. Continue replacement of exciters at Lower Monumental and Lower Granite. Finish replacement and upgrades on protective relays and fire protection at Lower Snake River projects. Begin head gate rehabilitation at McNary. Continue solicitation and purchase of spare or replacement transformers for several projects. Continue intake crane rehabilitation and station service improvements at The Dalles. Continue rehabilitation work at The Dalles, plus a variety of smaller continuing or new investments and repairs to failed units.

FY 2004	FY 2005	FY 2006
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**Bureau of Reclamation (known projects to date):**

FY 2004: Continued Grand Coulee runner replacements. Completed Grand Coulee repairs associated with station service fire and finish generator rewind of unit #4. Completed elevator rehabilitation at Grand Coulee. Continued or completed breaker replacement at Grand Coulee and other projects. Continued air housing cooler replacement at Grand Coulee. Continued modifications to Grand Coulee Arrival Center. Continued with replacement of air compressors at Grand Coulee. Purchased spare winding for Grand Coulee. Continued hydro optimization investigations and equipment installations at Grand Coulee. Began SCADA replacement at Grand Coulee and Hungry Horse. Continued life-safety modifications at Hungry Horse and completed life-safety modifications at Anderson Ranch. Completed Boise Diversion modernization. Completed unit breaker replacements at Palisades. Continued transformer replacement at Green Springs and begin replacement at Roza, plus a variety of smaller continuing or new investments and repairs to failed units.

FY 2005: Continue Grand Coulee runner replacements. Complete main unit breaker replacement at Grand Coulee. Continue air housing cooler replacement at Grand Coulee. Continue modifications to Grand Coulee Arrival Center. Continued other breaker and switchgear replacements at Grand Coulee. Continue replacement of air compressors at Grand Coulee. Purchase another spare winding for Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Continue SCADA replacement at Grand Coulee and Hungry Horse. Continue life-safety modifications at Hungry Horse. Continue transformer replacements at Green Springs and Roza. Start seal ring replacement at Chandler, plus a variety of smaller continuing or new investments and repairs to failed units.

FY 2006: Continue Grand Coulee runner replacements. Complete air housing cooler replacement at Grand Coulee. Complete modifications to Grand Coulee Arrival Center. Continue other breaker and switchgear replacements at Grand Coulee. Complete replacement of air compressors at Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Continue SCADA replacement at Grand Coulee and Hungry Horse. Start replacement of breakers at Hungry Horse. Complete life-safety modifications at Hungry Horse. Complete transformer replacements at Green Springs and Roza. Continue seal ring replacement at Chandler, plus a variety of smaller continuing or new investments and repairs to failed units.

<b>Fish and Wildlife. . . . .</b>	<b>8,514</b>	<b>36,000</b>	<b>36,000</b>
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Although the Sub-basin planning effort resulting in projects to be recommended for funding in FY 2006 is not complete, and is not expected to be completed until sometime in FY 2005, the following projects may be candidates for capital funding in FY 2006. It is Bonneville's intention to proceed with design and construction of those projects from this list that are recommended for funding within the available budget. The costs indicated are preliminary estimates only and actual costs may be greater or lower than those estimates, depending on final design and construction costs.

FY 2004	FY 2005	FY 2006
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FY 2004-2005 efforts include continued implementation of high priority ESA-related projects and activities associated with the NOAA Fisheries 2004 and USFWS 2000 Biological Opinions. Implementation of reforms to hatchery programs may also be warranted as information on the types of changes to these facilities are established and priorities for sequencing implementation are developed through the Council's Artificial Production Review Committee. Projects that implement the NOAA Fisheries 2004 and USFWS 2000 Biological Opinions are also described in the FCRPS Action Agencies' Implementation Plans. Bonneville may include capitalization of investment in land acquisition for fish and wildlife provided such costs exceed \$1 million and such investment provides a creditable and quantifiable benefit against a defined obligation for Bonneville.

Anadromous fish supplementation, production, and/or juvenile and adult passage improvement projects that may require capital funds in FY 2006 include the following:

- Yakima River Spring Chinook Supplementation Facility, located in Cle Elum, Washington: This project includes the construction of an interpretive building for public education and for the design and construction of a monitoring and evaluation building at Nelson Springs for use by project biologists.
- Johnson Creek Summer Chinook Salmon restoration, located in the South Fork Salmon Basin of Idaho: This project may include development and construction of facilities for adult collection and holding, juvenile rearing, and acclimation. The design and construction is expected to continue.
- Upper Snake River Spring Chinook Salmon captive broodstock acclimation and adult collection facilities (known as the Northeast Oregon Hatchery or NEOH), to be located on the Upper Grande Ronde River near La Grande, Oregon, on Catherine Creek near Union, Oregon, and on Lostine River near Enterprise, Oregon: The design and construction is expected to continue. This project, as a measure in the Council's Fish & Wildlife Program, would also identify and develop artificial propagation facilities to protect and enhance salmon and steelhead native to the Imnaha and Walla Walla River Basins.
- Salmon Creek restoration and enhancement of anadromous fish populations and habitat in Salmon Creek: This project would provide instream flows through on-farm water conservation and water leasing, design of a river pump station, an upgrade to the Salmon Lake Feeder Canal, and design for channel restoration. A hatchery feasibility study for supplementation of currently listed salmon and steelhead populations under the ESA is under discussion with the Bureau and may be appropriate for Bonneville funding, with construction potentially funded by the Bureau.

FY 2004	FY 2005	FY 2006
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- Walla Walla River Juvenile and Adult Passage Improvements: This project would provide safe passage for migrating juvenile and adult salmonids in the Walla Walla Basin by constructing and maintaining passage facilities at irrigation diversion dams and canals.
- Walla Walla Hatchery planning and design work.
- Grand Coulee and Chief Joseph Wildlife Habitat Acquisition
- Couer d'Alene Fish and Wildlife Habitat Acquisition
- Albeni Falls Wildlife Mitigation.
- Blue Creek Winter Range Wildlife Habitat Acquisition
- Yakima Valley Fish and Wildlife Habitat Acquisition
- Grande Ronde Wildlife Habitat Acquisition
- Salmon River Fish Habitat Acquisition
- Fish and Wildlife Land Acquisition - Selah Gap to Union Gap.

**Conservation and Energy Efficiency. . . . . 16,973 32,500 29,000**

The Conservation Augmentation (ConAug) program offers several ways for customers to participate in regional conservation. ConAug program components include: (1) utility standard offer and custom programs, which include the request for Interest in Reducing Load Through Conservation (IRLC), which resulted in customer proposals to conserve energy through residential weatherization, commercial lighting and HVAC (High Voltage Direct Current), industrial processes and lighting, and irrigated agriculture; (2) third party delivery programs, such as residential compact fluorescent lighting, "Vending MiSer" (a program to reduce energy use in regional refrigerated vending machines) and the Water and Waste Water Treatment Facilities program; (3) Federal programs to help Federal installations in the region reduce energy use, which includes the Federal Hatcheries program and work at various dams to help the Corps and the Bureau in their efforts to reduce energy use; and (4) other initiatives still in the design stage.

<b>Total Power Business Line – Capital . . . . .</b>	<b>136,806</b>	<b>199,658</b>	<b>184,400</b>
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FY 2004	FY 2005	FY 2006
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## Explanation of Funding Changes

FY 2006 vs. FY 2005 (\$000)
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### Associated Project Costs

- Decrease is a reshaping of funding requirements based on the need to maintain a minimum level of generation each year. The reshaping provides a modest increase in investment in FY 2005. The increase would provide additional flexibility for unanticipated outages or repairs in these two years.
 -11,758

### Fish and Wildlife

No change ..... 0

### Conservation and Energy Efficiency

- BPA has been working with its delivery partners to reduce its conservation costs. .... -3,500

<b>Total Funding Change, Power Business Line - Capital .....</b>	<b>-15,258</b>
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# Transmission Business Line – Capital

## Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2004	FY 2005	FY 2006	\$ Change	% Change
Main Grid . . . . .	154,327	58,855	96,498	+37,643	+64.0%
Area & Customer Services . . . . .	5,626	10,604	20,049	+9,445	+89.1%
Upgrades & Additions . . . . .	54,248	45,599	62,761	+17,162	+37.6%
System Replacements . . . . .	59,614	83,202	87,271	+4,069	+4.9%
Projects Funded in Advance . . . . .	41,317	153,791	147,359	-6,432	-4.2%
Total, Trans Business Line - Capital	315,132	352,051	413,938	+61,887	+17.6%

## Description

The TBL is responsible for about 75 percent of the Pacific Northwest's high-voltage transmission. TBL provides for all additions, upgrades, and replacements to the Federal transmission system, resulting in reliable service to northwest industrial users and utility customers. The transmission system also facilitates the sale and exchange of power to and from the region. TBL offers transmission service under the terms and conditions of its Open Access Transmission Tariff (OATT).

The eastern blackout on August 14, 2003, alerted the Nation to the lack of investment in utility infrastructure. BPA received its alert with the August 10, 1996, West Coast disturbance that originated in the Northwest. Infrastructure investment is being made and operational practices were changed to strengthen the system. The West Coast energy crisis of 2000-2001 was a second red flag that triggered the need for the BPA transmission infrastructure program to shore up the grid.

TBL is continuing to make significant infrastructure improvements and additions to the system over the next several years to assure open and non-discriminatory access as guided by FERC. These improvements and additions will help the Federal transmission system continue to comply with national reliability standards, replace aging equipment, allow for interconnection of needed new generation, and remove constraints that limit economic trade or the ability to maintain the system. Prior to beginning the infrastructure improvements, the TBL had built no major transmission projects since 1987. Only incremental additions had been added to the system over the years.

The system continues to show signs of stress, as two close calls in 2003 demonstrated. On June 4, 2003, voltage instability in the Spokane area was prevented by quick operator action. Two weeks later the transmission path between Montana and Idaho was overloaded for two days, and operator adjustments prevented load loss.

In addition, about 15,000 megawatts of generation are under consideration for siting in the Northwest. The Transmission System will become even more stressed as generation is added if nothing is done to reinforce the existing network.

Bonneville's infrastructure investments to strengthen the network consist of the following projects:

(G1) Puget Sound Area Additions (Complete), (G2) North of Hanford/North of John Day (under construction), (G3) West of McNary (pending generation interconnection decisions), (G4) Starbuck Generation (cancelled), (G5) Lower Monumental and McNary Area Generation (Phase II) (cancelled), (G6) Cross Cascades North (Complete), (G7) Celilo Modernization (completed), (G8) I-5 Corridor Additions (on hold), (G9) Spokane Area and Western Montana Generation Additions (under construction), (G10) Portland Area Additions (Complete), (G12) Olympic Peninsula Additions (under further study), (G13) I-5 Corridor Generation Additions (Southwest Washington-Northwest Oregon) (on hold pending generation interconnection decisions). These projects are further described below.

These projects will relieve congestion contributing toward restoring an adequate reliability margin back into the grid. This additional margin will be used to respond to a competitive market, meet regional load during outages, move power to meet changing loads, perform maintenance without harming the market, and allow the Grid West (formally referred to as RTO West) to start without the regional grid being heavily congested.

Bonneville assumes that some generators will integrate their power into the Federal transmission system. Depending on which generators build on sites in the Northwest and the project locations, significant generation capacity can be integrated with the completion of those generator integration projects listed above. Bonneville assumes that the additions and improvements necessary for generation integration will be funded by generators. BPA assumes that it will amortize the upfront payments through credits for transmission services, as FERC has encouraged.

As a means to further sustain BPA's limited Treasury financing, third-party funding partnerships also are being pursued for some projects. For example, on projects associated with generation integration, the potential generation or transmission customers are being consulted regarding funding the construction of these projects. The Schultz-Wautoma (part of G2) 500-kV project is being funded through third party financing, and non-Federal funding for the McNary-John Day (part of G3) 500-kV transmission project is being pursued as well.

The system replacement plan is to replace high-risk, obsolete, and maintenance-intensive facilities and equipment and to reduce the chance of equipment failure by: 1) replacing high voltage transformers and power circuit breakers that are at or near the end of their useful life; 2) replacing risky, outdated, and obsolete control and communications equipment and systems; and 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

Bonneville will continue to fund fiber optic communications facilities needed to meet Bonneville's projected operational needs. To the extent that these investments create temporary excess fiber optic capacity, such capacity can be made available to telecommunications providers and to regional non-profits to meet public benefit needs. Bonneville's investments in fiber optics are consistent with the "Fiber Optic Cable Plan" submitted to Congress on May 24, 2000, accompanying the FY 2000 Energy and Water Development Appropriations Act.

## Detailed Justification

	(dollars in thousands)		
	FY 2004	FY 2005	FY 2006
<b>Main Grid</b> .....	<b>154,327</b>	<b>58,855</b>	<b>96,498</b>

Bonneville's strategic objectives for Main Grid projects are to provide voltage support; provide a reliable transmission system for open access per FERC criteria; provide for relief of transmission system congestion; and to assure compliance with the Nuclear Energy Regulatory Commission (NERC), Western Electric Coordinating Council (WECC) and BPA reliability standards. During this budgeting period, projects are planned that will provide voltage support to major load areas that are primarily west of the Cascade mountains, and will provide for transmission access for new generation projects to the load center. Minor reinforcements in the Portland, Oregon/Seattle, Washington corridor are also planned.

- FY 2004: 1) Completed construction of the Kangley-Echo Lake 500-kV line and substation addition at Echo Lake, and the 500/230-kV transformer bank addition at SnoKing Substation (G1- Puget Sound Area Additions); 2) Continued Wautoma Substation construction (G2- North of Hanford/North of John Day); 3) Completed installation of the 500-kV series capacitor addition at Schultz substation (G6 -Cross Cascades North); 4) Continued construction of the Grand Coulee-Bell 500-kV line and substation additions including 500-kV series capacitor additions at Bell and Dworshak substation, 500-kV series capacitor and controls replacement at Garrison Substation (G9- Spokane Area and Western Montana Generation Additions); 5) Continued construction of the 500-kV shunt reactor addition at Grand Coulee; 6) Completed the installation of the 500/230-kV transformer bank addition at Pearl Substation (G10- Portland Area Additions); 7) Continued the Ostrander 500-kV shunt capacitor group addition; 8) Began environmental analysis, demand side management study, design and material acquisition for Olympic Peninsula Addition II (G12); 9) Delayed the loop in of the Wautoma-Ostrander 500-kV line to Big Eddy Substation (G14) to FY 2012; 10) Delayed the Libby-Sand Spring-Bell 230-kV project (G15 & G20) to FY 2012; 11) Placed the Monroe-Echo Lake 500-kV line #2 (G8- I-5 Corridor Additions) on hold; 12) Completed tower footings and mitigation for tower crossing at McNary for the G-3 West of McNary; 13) Continued planning studies and design to comply with the N-2 outage reliability criteria; 14) Continued planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions;



(dollars in thousands)

FY 2004	FY 2005	FY 2006
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15) Continued planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; 16) Continued planning studies to identify and clarify needed infrastructure additions.

- FY 2005: (1) Continue construction of the Schultz-Wautoma 500-kV line and Wautoma Substation (G2- North of Hanford/North of John Day); 2) Complete construction of Grand Coulee-Bell 500-kV line (G9); 3) Continue planning studies for the Olympic Peninsula Addition II project (G12); 4) Review and keep current studies for the Southwest Washington-Northwest Oregon generation integration project (G13) (on hold); 5) Continue studies for the loop in of the Wautoma-Ostrander 500-kV line to Big Eddy Substation (G14); 6) Continue planning studies for the Monroe-Echo Lake 500-kV line #2 (G8) (I-5 Corridor Additions); 7) Design will be completed, materials ordered, and construction started on the West of McNary (G-3), pending generation interconnection decisions; (G4) Starbuck Generation (cancelled), (G5) Lower Monumental and McNary Area Generation (Phase II) projects; 8) Continue planning studies and design to comply with the N-2 outage criteria; 9) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; 10) Continue planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; 11) Continue planning studies to identify and clarify needed infrastructure additions.
- FY 2006: 1) Complete construction of the Schultz-Wautoma 500-kV line and Wautoma Substation (G2- North of Hanford/North of John Day); 2) Complete construction of West of McNary (G-3), pending generation interconnection decisions; 3) Continue planning studies to identify and clarify needed infrastructure additions; 4) Continue planning studies and design to comply with the N-2 outage criteria; 5) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; 6) Continue planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities.

**Area & Customer Service . . . . . 5,626 10,604 20,049**

Bonneville's strategic objective for Area and Customer Service projects is to assure that Bonneville meets the reliability standards and the contractual obligations we have to our customers for serving load.

- FY 2004: 1) Completed construction to rebuild the Albany-Eugene 115-kV line to double circuit from Eugene to the Alderwood Tap; 2) Completed the rebuild of Minidoka Substation; 3) Cancelled adding 115-kV line sectionalizing switches at Victor Tap; 4) Retired low voltage facilities at Addy Substation; 5) Replaced the 115-12.5-kV transformer at Duckabush Substation; 6) Completed conversion of 69 to 115-kV facilities at Port

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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Angeles and Fairmount substations; 7) Delayed adding 230-kV and 115-kV terminal facilities at Vintage Valley Substation to FY 2007; 8) Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

- FY 2005: 1) Add 115k-V switches at Olympia Substation; 2) Add a 115-kV terminal at McNary Substation; 3) Relocate approximately 1 mile of the White Bluffs-Richland 115-kV line; 4) Add a 115-kV circuit breaker at Targee substation; 5) Begin work on a new Caribou substation to support Lower Valley Power & Light; 6) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.
- FY 2006: 1) Begin studies for SW Oregon Coast (Bandon-Rogue); 2) Begin studies for East Omak 230/115-kV transformer; 3) Continue work on new Caribou Substation; 4) Replace Hampton transformer; 5) Add two 115-kV breakers at Red Mountain Substation; 6) Add shunt caps for Fords Prairie area; 7) Add SVC for Condon wind generation; 8) Reconductor Chehalis-Centralia 69-kV #1 & #1 lines; 9) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

#### **Upgrades & Additions**

**54,248**

**45,599**

**62,761**

Bonneville's strategic objectives for Upgrades and Additions are to replace older communications and controls with newer technology, including fiber optics, in order to maintain or enhance the capabilities of the transmission system; to implement special remedial action control schemes to accommodate new generation and mitigate immediate operational and market constrained paths; and to support communications and remedial action schemes, and other associated activities. During this budget period, BPA will complete design, material acquisition, construction, and activation of several fiber optics facilities to provide bandwidth capacity and high-speed data transfers to eventually replace microwave analog radios that are technologically obsolete and nearing the end of their useful life. In some areas, temporarily excess fiber capacity is being offered for a term to telecommunications providers or to non-profit entities as a public benefit.

- FY 2004: 1) Completed construction of the 12 mile fiber optic cable on the Raver-Echo Lake 500-kV line; 2) Completed construction of the Kalispell-Hot Springs digital radio section of the Noxon-Hot Springs 200-mile fiber optic project; 3) Continued construction of the Thompson Falls to Taft sections of the 175-mile Noxon-Hatwai fiber optic project; 4) Continued construction of 41 miles of fiber optic cable and terminations from Echo lake to Monroe to Snohomish; 5) Delayed the design, material acquisition construction of 32 miles

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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of fiber optic cable between Covington, Maple Valley, and Echo Lake; 6) Continued construction of fiber projects and digital radio system upgrades to improve the operational telecommunication system; 7) Continued replacement and upgrade of operational and business tools at the Dittmer and Munro control centers; 8) Continued planning, design, material acquisition, and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; 9) Continued planning, design, material acquisition, and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.

- FY 2005: 1) Complete the Thompson Falls to Taft sections of the 175-mile Noxon-Hatwai fiber optic project; 2) Complete construction of the 41-mile fiber optic Echo Lake-Monroe-Snohomish project; 3) Begin the design, material acquisition and start construction of the 32-mile Covington-Maple Valley-Echo Lake fiber optic project; 4) Begin the design, material acquisition for the 45-mile Pearl-Troutdale fiber optic project; 5) Continue construction of fiber related projects and digital radio system upgrades to improve the operational telecommunication system; 6) Continue replacement and upgrade of operational and marketing business tools at the Dittmer and Munro control centers; 7) Continue planning, design, material acquisition, and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; 8) Continue planning, design, material acquisition, and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.

FY 2006: 1) Complete construction of the 32-mile Covington-Maple Valley-Echo Lake fiber optic project; 2) Start construction of the 45-mile Pearl-Troutdale fiber optic project; 3) Begin design and material acquisition for the 40-mile Pearl-Marion fiber optic project (pending the start of the Sempra generation project); 4) Begin design and material acquisition for the 68-mile Snohomish-Bellingham fiber optic project; 5) Continue construction of fiber related projects and digital radio system upgrades to improve the operational telecommunication system; 6) Continue replacement and upgrade of operational and marketing business tools at the Dittmer and Munro control centers; 7) Continue planning, design, material acquisition, and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; 8) Continue planning, design, material acquisition, and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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## **System Replacements**

**59,614      83,202      87,271**

Bonneville's strategic objectives for System Replacement are to replace high-risk, obsolete, and maintenance-intensive facilities and equipment and to reduce the chance of equipment failure by: 1) replacing high-voltage transformers and power circuit breakers which are at or near the end of their useful life; 2) replacing risky, outdated, and obsolete control and communications equipment and systems; and 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

### **Non-Electric Replacements:**

- FY 2004: 1) Completed various maintenance building and control house roof replacements; 2) Completed seismic upgrades to buildings; 3) Completed various HVAC (high-voltage alternating current) replacements; 4) Completed other non-electric replacements as necessary; 5) Continued the design, material acquisition, and construction for the Access Road Program; 6) Preliminary design activities for potential Dittmer Control Center expansion initiated.
- FY 2005: 1) Complete various maintenance building and control house roof replacements; 2) Complete seismic upgrades to buildings; 3) Complete various HVAC replacements; 4) Complete other non-electric replacements as necessary; 5) Continue the design, material acquisition, and construction for the Access Road Program.
- FY 2006: 1) Complete various maintenance building and control house roof replacements; 2) Complete seismic upgrades to buildings; 3) Complete various HVAC replacements; 4) Complete other non-electric replacements as necessary; 5) Continue the design, material acquisition, and construction for the Access Road Program.

### **Electric Replacements:**

- FY 2004: 1) Completed replacement of aged AC-DC converter valves and control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability (G7); 2) Completed the reconductor of approximately 22 miles of the John Day-Big Eddy 500-kV line; 3) Completed replacement of PCB-contaminated capacitors at various locations; 4) Completed replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment, and SCADA equipment; 5) Completed replacement of under-rated and high-maintenance substation equipment; 6) Continued replacing spacer dampers on various 500-kV lines; 7) Completed replacement of certain critical, operational

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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tools and marketing business systems at the Dittmer and Munro Control Centers; 8) Continued replacing deteriorating wood pole transmission line structures.

- FY 2005: 1) Replace system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment, and SCADA equipment; 2) Replace under-rated and high-maintenance substation equipment; 3) Replace spacer dampers on various 500-kV lines; 4) Replace critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; 5) Replace deteriorating wood pole transmission line structures.
- FY 2006: 1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment, and SCADA equipment; 2) Continue replacement of under-rated and high-maintenance substation equipment; 3) Continue replacing spacer dampers on various 500-kV lines; 4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; 5) Continue replacing deteriorating wood pole transmission line structures.

**Projects Funded in Advance ..... 41,317      153,791      147,359**

This category includes those facilities and/or equipment where BPA retains ownership but which are funded by a third party, either in total or in part.

- FY 2004: 1) Continued study work to integrate new 1,300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the OATT (G5) (cancelled); 2) Placed on hold the design, material acquisition, and construction of the Southwest Washington-Northwest Oregon 500-kV line addition (G13); 3) Continued studies for the integration of new 290 MW generation capacity near Longview into the BPA transmission grid per Transmission Service Request via the OATT; 4) Started planning to integrate new 1,300 MW generation capacity near West of McNary pending generator interconnection decisions; 5) Continued to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the OATT; 6) Started construction of the Schultz-Wautoma (G-2) 500-kV transmission line; 7) Performed studies to identify system impacts and needs regarding proposed new generation projects; 8) Performed environmental cleanup and other work necessary for the sale of BPA facilities; 9) Completed other projects as requested by customers.
- FY 2005: 1) Continue work to integrate new 1,300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the OATT (G5)

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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(cancelled); 2) Continue hold on the design, material acquisition, and construction of the Southwest Washington-Northwest Oregon 500-kV line addition (G13); 3) Complete design, order materials, start construction on the West of McNary (G3), pending generator interconnection decisions; 4) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the OATT; 5) Continue construction of the Schultz-Wautoma (G-2) 500-kV transmission line; 6) Perform studies to identify system impacts and needs regarding proposed new generation projects; 7) Perform environmental cleanup and other work necessary for the sale of BPA facilities; 8) Complete other projects as requested by customers; 9) Complete engineering estimates and timelines for 37 microwave paths in the 1710-1755 Mhz frequency band to facilitate a frequency spectrum auction related to P.L. 108-494, the Commercial Spectrum Enhancement Act, signed on December 23, 2004. The costs to perform the engineering studies, as well as relocation costs, will be fully compensated by funds from the auction, expected to be held as early as June 2006.

- FY 2006: 1) Complete work to integrate new 1,300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the OATT (G5) (cancelled); 2) Resume design, material acquisition, and construction of the Southwest Washington-Northwest Oregon 500-kV line addition (G13); 3) Complete design, order materials, start construction on the West of McNary (G3), pending generator interconnection decisions; 4) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the OATT; 5) Complete construction of the Schultz-Wautoma 500-kV transmission line; 6) Perform studies to identify system impacts and needs regarding proposed new generation projects; 7) Perform environmental cleanup and other work necessary for the sale of BPA facilities; 8) Complete other projects as requested by customers.

<b>Total Transmission Business Line – Capital . . . . .</b>	<b>315,132</b>	<b>352,051</b>	<b>413,938</b>
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### Explanation of Funding Changes

FY 2006 vs. FY 2005 (\$000)
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#### Main Grid

- Reflects fiscal year shifts in material and construction costs associated with the infrastructure projects and to accommodate projects associated with updated power flow study results . . . . . +37,643

#### Area & Customer Services

- Reflects greater emphasis on customer service projects. . . . . +9,445

**Upgrades & Additions**

- Reflects increased emphasis on both systemwide communications upgrades and improvements and additions to other transmission facilities . . . . . +17,162

**System Replacements**

- Reflects greater emphasis on system replacements . . . . . +4,069

**Projects Funded in Advance**

- Reflects less emphasis on completion of large customer funded or third party funded projects related to generation integration . . . . . -6,432

**Total Funding Change, Transmission Business Line - Capital . . . . . +61,887**

# Capital IT & Equipment/Capitalized Bond Premium

## Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2004	FY 2005	FY 2006	\$ Change	% Change
Capital Information Technologies & Equipment .....	28,081	35,022	36,491	+1,469	+4.2%
Capitalized Bond Premium .....	0	0	0	0	0.0%
Total, Capital Equipment/Capitalized Bond Premium .....	28,081	35,022	36,491	+1,469	+4.2%

## Description

Capital Information Technologies and Equipment provides for the acquisition of general and some dedicated business line special purpose capital information technologies, and acquisition of special-use capital and IT equipment in support of Bonneville's strategic objectives.

As part of a major efficiency effort and in support of the President's Management Initiative on Expanded Electronic Government, BPA is consolidating its IT management. This FY 2006 budget incorporates the results of the consolidation efforts. BPA is seeking additional efficiencies as part of the consolidation of IT. The IT consolidation initiative is targeted to: eliminate redundancies in tools and applications; establish an agency wide IT architecture with standardized IT purchasing criteria; consolidate licensing processes and minimize agency liabilities through stronger contracts; improve IT project management; and formulate an agency IT portfolio cost management strategy. The consolidated IT budget in this FY 2006 budget, under Capital Information Technologies and Equipment, starting in FY 2005, includes all IT functions within the agency except TBL grid operations. See the Capital Program – Transmission Services Business Line section of this budget for additional discussion of transmission-related IT requirements acquisitions.

Bonneville incurs a bond premium whenever it repays a Treasury bond before the due date. When bonds are refinanced, the bond premiums incurred are capitalized. Historically, Bonneville generally has chosen to finance capitalized bond premiums with bonds issued to the Treasury, as was envisioned in the Transmission System Act of 1974.



## Detailed Justification

(dollars in thousands)

	FY 2004	FY 2005	FY 2006
<b>Capital Equipment</b> .....	<b>28,081</b>	<b>35,022</b>	<b>36,491</b>
<ul style="list-style-type: none"> <li>■ Includes enhancements to Bonneville's information technology processes to provide cost effective efficiencies for secure, timely and accurate information. Continue enhancements to Bonneville's Enterprise systems that are designed to link key information systems throughout Bonneville and improve business processes. Current efforts include functional expansion into areas not implemented during the initial development phase. Acquire capital office furniture and equipment, capital automatic data processing (ADP) -based administrative telecommunications equipment, ADP equipment (hardware), and support capital software development for certain Bonneville programs.</li> </ul>			
<b>Capitalized Bond Premium</b> .....	<b>0</b>	<b>0</b>	<b>0</b>
<ul style="list-style-type: none"> <li>■ Continue to assess financial market and when cost-effective, refinance available bonds as prudent.</li> </ul>			
<b>Total, Capital Equipment/Capitalized Bond Premium</b> .	<b>28,081</b>	<b>35,022</b>	<b>36,491</b>

## Explanation of Funding Changes

	FY 2006 vs. FY 2005 (\$000)
<b>Capital Equipment</b>	
<ul style="list-style-type: none"> <li>■ Slight increase reflects continuing emphasis on IT improvements .....</li> </ul>	+1,469
<b>Capitalized Bond Premium</b>	
<ul style="list-style-type: none"> <li>■ No change .....</li> </ul>	0
<b>Total, Funding Change Capital Equipment/Capital Bond Premium</b> .....	<b>+1,469</b>

# Power Business Line - Operating Expense

## Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2004	FY 2005	FY 2006	\$ Change	% Change
Production . . . . .	1,432,324	1,629,188	1,628,933	-255	0.0%
Associated Projects Costs.	230,873	242,636	249,999	+7,363	+3.0%
Fish & Wildlife . . . . .	138,158	138,896	138,892	-4	0.0%
Residential Exchange . . .	125,915	144,418	144,435	+17	0.0%
NW Power & Conservation Council . . . . .	7,480	8,700	8,700	0	0.0%
Conservation and Energy Efficiency. . . . .	60,521	62,208	63,472	+1,264	+2.0%
Total, Power Services - Operating Expense . . . . .	1,995,271	2,226,046	2,234,431	+8,385	+0.4%

## Description

Production includes all Bonneville strategic resource planning and business development, short- and long-term power purchases, wheeling, electric utility marketing of resources, hedging-related costs, and generation and oversight costs, including a large thermal nuclear project. These activities identify the Administrator's load obligations, develop product plans and services to meet the needs of Bonneville customers and stakeholders, and acquire resources as needed. As a means of mitigating power market risk, Bonneville's Hedging Policy allows the use of financial instruments in the power, natural gas, aluminum, and interest rate markets to hedge the price of electricity and reduce Bonneville's exposure to exposure to market fluctuations and certain index sales contract provisions. BPA has established controls to mitigate risk associated with its hedging activity including designing and documenting hedging strategies, analysis and testing of the strategies, financial reviews of parties prior to BPA conducting hedging transactions with them, and approval processes of transactions by the Transaction Risk Management Committee and appropriate BPA managers.

Associated Projects provide funding for operation and maintenance costs for the FCRPS, minor additions, improvements and replacements, and liabilities of the Corps and Bureau hydroelectric projects in the Pacific Northwest, which serve many purposes. All agencies emphasize efficient power production from existing facilities and improvement of the performance and availability of power generating units. Bonneville pays additional financing costs of the FCRPS facilities through its Interest Expense and Capital Transfer budget programs. Bonneville provides funding for the operations and maintenance costs that are part of the Lower Snake River Compensation Plan (LSRCP) hatcheries. Bonneville is responsible for annual payments to the Confederated Tribes of the Colville Reservation for their claims concerning their contribution to the production of hydropower by the Grand Coulee Dam in accordance with the Settlement Agreement between the United States and the Tribes (April 1994).

Bonneville's Fish and Wildlife Program provides for the protection, enhancement, and mitigation of Columbia River Basin fish and wildlife due to losses attributed to the development and

operation of hydroelectric projects on the Columbia River and its tributaries. Bonneville satisfies a major portion of its fish and wildlife responsibilities pursuant to Section 4(h) of the Northwest Power Act by funding projects and activities designed to be consistent with the Council Fish and Wildlife Program. Bonneville is also mandated to implement measures called for under the ESA. These measures are part of the biological opinions issued in November 2004 by the NOAA Fisheries and in 2000 by the USFWS to address the effects of the operation of the FCRPS on threatened and endangered salmon and steelhead and ESA-listed Kootenai River – white sturgeon and bull trout. The biological opinions require the FCRPS Action Agencies to implement actions in the Columbia River Basin that impacts of the Federal hydrosystem on ESA-listed fish to ensure that operation of the FCRPS does not jeopardize the continued existence of listed species or adversely modify their designated critical habitat. The NOAA Fisheries 2000 Biological Opinion on the FCRPS was challenged in Federal District Court and found to be legally invalid. The Court remanded it to NOAA to issue an opinion consistent with the Court's holdings. The revised opinion was issued on November 30, 2004. In February 2005, the FCRPS Action Agencies will publish an implementation plan for their proposed action addressed in the NOAA Fisheries 2004 Biological Opinion.

The Implementation Plan, together with projects undertaken to address mitigation for non-listed species under the Northwest Power Act, and those to address requirements of the USFWS 2000 FCRPS Biological Opinion form the basis for BPA's planned expenditures of \$139 million per year. This is within the range of \$109 - \$179 million of accrued expenses assumed in the 2002 Power Rate Proposal, prior to the biological opinions and Implementation Plan. Bonneville worked with the Council and regional fisheries managers to develop an agreed-upon set of protocols to be used in managing the costs of the program for the FY 2004-2006 period. The objective is to keep Bonneville's expenditures to an annual average of \$139 million, while allowing contractors both funding stability and the flexibility needed to accomplish the work while being responsive to environmental conditions.

Bonneville's fish and wildlife expenditures funds will focus on activities that benefit Columbia River Basin fish and wildlife resources including projects designed to:

- increase survival of ESA-listed and non-listed fish at FCRPS dams and reservoirs;
- increase survival of ESA-listed and non-listed fish throughout their life cycle by protecting and enhancing important habitat areas;
- reform hatchery practices and use hatcheries to contribute to conservation and recovery of ESA-listed and non-listed fish;
- reduce harvest-related mortality on ESA-listed and non-listed fish and support sustainable fisheries; and,
- support a disciplined and well-coordinated research, monitoring, and evaluation program.

To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS Biological Opinions with projects implemented under the Council's Fish and Wildlife Program. Recently completed Sub-basin Plans that include prioritized strategies for mitigation actions will serve as the template for project selection that meet both BPA's ESA and Northwest Power Act responsibilities. Discussion of a minimum cost-sharing requirement for fish and wildlife projects funded by BPA in 2007 and beyond is occurring in currently ongoing long-term funding discussions with the Council and the regional fish and wildlife managers and Tribes.

The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an ISRP "to review projects proposed to be

funded through that portion of Bonneville Power Administration's fish and wildlife budget that implements the Council's fish and wildlife program." And, "... in making its recommendations to Bonneville, the Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." The Conference Report on the FY 1999 Energy and Water Development Appropriations Act included a new assignment for the ISRP and the Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed, and/or directly funded, by Bonneville and to make funding recommendations to Congress. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and provide a report to the Council by April 1 of each year. The Council, in turn, must report to the Congress annually by May 15. Consequently, projects funded under Bonneville's Integrated Fish and Wildlife Program will be reviewed and prioritized as part of the Council initiative process.

Consistent with the principles of the Federal Caucus' All-H Strategy, Bonneville is implementing much of the off-site mitigation actions required by the FCRPS Biological Opinions through the Council's Fish and Wildlife Program. Under the Northwest Power Act, the Fish and Wildlife Program is tasked with protecting and rebuilding the Columbia River Basin fish and wildlife affected by the development and operation of the FCRPS.

The Northwest Power Act created the Residential Exchange Program (REP) to extend the benefits of low-cost Federal power to the residential and small farm customers of Pacific Northwest electric utilities that meet certain conditions. The 1996 Comprehensive Regional Review recommended that Bonneville engage in settlement discussions regarding the Residential Exchange. Bonneville then developed a Subscription Strategy based on the recommendations of the Comprehensive Review. That strategy proposed a comprehensive settlement of the REP for IOUs in the Pacific Northwest, which has resulted in new contracts with regional IOUs that provide power and monetary benefits to their residential and small farm customers.

To settle the REP with the IOUs, IOU customers were offered 1,900 aMW in power and monetary benefits for the FY 2002-2006 rate period. The power is sold at a price equivalent to the priority firm power rate. The monetary benefits are calculated based on the forecast of the cost of purchasing the power in the market that was used in the June 2001 Supplemental Rate Proposal, less the rate used for sale of power to the IOU customers, adjusting for the CRACs. All six regional IOUs signed contracts in the fall of 2000 implementing this settlement of the Residential Exchange. They originally were to receive 1,000 aMW of power and 900 aMW in monetary benefits for FY 2002-2006, but two IOUs subsequently sold 619 aMW of power back to Bonneville as part of Bonneville's rate mitigation efforts for FY 2002. In addition, three other

IOUs triggered the clause in their contracts to convert their power purchases to financial payments. In FY 2007 the total amount of settlement benefits changes to 2,200 aMW. New contracts signed with all IOUs in May 2004 specified, among other provisions that the 2,200 aMW in benefits would be provided entirely as monetary benefits.

Bonneville's preference utilities, or public agency utilities, have been eligible to execute new Residential Exchange Program contracts since October 2001, except for the nine utilities that previously executed settlement agreements for terms ending July 1, 2011. These customers have been forecasted to have average system costs that are lower than the Exchange Program rate and thus would not qualify for these benefits.

The Northwest Power Act directs that expenses of the Council, subject to certain limits based on forecasted Bonneville power sales, shall be included in Bonneville's annual budget to Congress. Funding for the Council is provided by Bonneville and is recovered through Bonneville power rates. Its major activities include the periodic preparation of a Northwest Conservation and Electric Power Plan (a 20-year electric energy demand and resources forecast and energy conservation program) and a Columbia River Basin Fish and Wildlife Program of loss mitigation and resource enhancement actions.

The competitive market situation is driving the need for alternatives to the traditional approaches to developing conservation resources. The PBL will acquire conservation in accordance with the Council's guidance and act as a catalyst for energy efficiency and direct application renewables. These resources will provide a vital component of PBL's diversified resource portfolio that will: 1) meet conservation targets; 2) achieve a least cost resource mix; 3) dampen the cost impacts of power purchases; 4) avoid the costs of ramping programs and infrastructure up and down; 5) extend the value of the FCRPS to customers; and 6) build the region's resource portfolio with conservation and direct application renewables. Bonneville also is exploring how best to integrate demand-side management, distributed generation, and other leading edge technologies (i.e. Energy Web program and non wires solutions) into its transmission planning process.

## Detailed Justification

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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<b>Production .....</b>	1,432,324	1,629,188	1,628,933
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- **Power Purchases:** Includes purchase power for efficient operation of the power system, fish mitigation, and resale. Due to higher and more volatile market prices in 2001, Bonneville was subject to much greater demand for service from its customers for FY 2002-2006. This increase in load required that Bonneville make substantially greater power purchases in the market. In order to mitigate a larger rate increase, FY 2005 and FY 2006 expenses include \$206 million and \$2 million, respectively, in IOU and DSI load buy downs.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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- **Power Scheduling/Marketing:** Schedule and market (buy/sell) electric energy with Bonneville customers and the Pacific Northwest's interconnected utilities. Scheduling includes PBL's implementation of physical and memo power schedules and associated transmission schedules, implementation of Electronic Tagging (ETag) in accordance with NERC and in accordance with FERC, implementation of electronic scheduling and the RTO as it evolves. PBL's development of a new Transaction Scheduling System will facilitate the above needs.

Trojan: Continue termination and decommissioning of Bonneville's 30 percent share of the Trojan Nuclear Plant. Decommissioning continues at a consistent level through FY 2005.

- **Columbia Generating Station (formerly WNP-2):** Continue to acquire full capability of Columbia Generating Station (Columbia). Columbia is on a 24-month fuel and outage cycle. A maintenance and refueling outage is planned for FY 2005.
- **WNP-1/WNP-3:** Continue to fulfill contractual obligations for WNP-1 and WNP-3.
- **Long-Term Power Purchases and Wheeling:** Continue to acquire 100 percent of the Idaho Falls, Cowlitz Falls, Wauna, and Bonneville's share of Foote Creeke 1 project output. Continue contract payments on four billing credit projects. Continue to acquire 100 percent of the output of the Foote Creek 2 and 4 wind projects and a 15-kW share of the output from the Solar Ashland Project. Continue to acquire 90 MWs of Stateline wind project. Continue to acquire 100 percent of the output of the Condon and Klondike wind projects. Continue to fund the White Bluffs solar project. Make decisions whether to acquire output from additional renewable generation projects and /or provide resource integration services for additional renewable generation.
- **Generation and Oversight:**

FY 2004: Continued to provide oversight of all contracts signed to date.

FY 2005: Continue to provide oversight of all contracts signed to date. Complete the NEPA process for the Maiden Wind project. Provide oversight of large thermal generating plants from which Bonneville purchases capability to ensure that all Bonneville approval rights are protected; coordinate, communicate, and administer agreements, issues, and programs between Bonneville and the project owners. Continue to make decisions whether to acquire a share of the output from additional renewable generation projects and/or provide resource integration services for additional renewable generation.

FY 2006: Continue to provide oversight of all contracts signed to date. Provide oversight of large thermal generating plants from which Bonneville purchases capability to ensure that all Bonneville approval rights are protected; coordinate, communicate, and administer agreements, issues, and programs between Bonneville and the project owners. Complete NEPA process and make decisions whether to acquire renewable generation projects initiated in FY 2003.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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**Associated Project Costs** ..... 230,873    242,636    249,999

- Support FCRPS project costs and work to strengthen relationships to improve project support and better understand project costs. This helps to maintain FCRPS system integrity and to attain BPA's strategic business objectives.

■ Bureau of Reclamation:

FY 2004: Continued direct funding Bureau O&M power activities.

FY 2005: Continue direct funding Bureau O&M power activities.

FY 2006: Continue direct funding Bureau O&M power activities.

■ Corps of Engineers:

FY 2004: Continued direct funding Corps O&M power activities.

FY 2005: Continue direct funding Corps O&M power activities.

FY 2006: Continue direct funding Corps O&M power activities.

**Fish and Wildlife** ..... 138,158    138,896    138,892

- In a manner consistent with the assumptions used for the 2002 Power Rate Proposal:

Anadromous Fish: Continue implementing projects that support ESA-listed species and other measures called for under the NOAA Fisheries 2004 Biological Opinion and amended FCRPS Action Agency proposal. Identify and select activities for implementation. Implement and develop activities that protect and enhance tributary and estuary habitat, improve mainstream habitat on an experimental basis, reduce potentially harmful hatchery practices, and contribute to sustainable fisheries. These activities have been selected in response to the Northwest Power Act section 2(6) to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

Resident Fish: Implement activities to determine the impacts of the FCRPS on bull trout and mitigate for those impacts, and promote the reproduction and recruitment of Kootenai River white sturgeon. These activities have been selected in response to the USFWS 2000 Biological Opinion and the Northwest Power Act to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

Continue mitigation in resident fish for anadromous losses (substitution), mitigation for reservoir operation impacts to resident fish, and continue to refine, quantify, and delineate the difference between the two.

- Wildlife: Continue the current program including funding for wildlife actions resulting from Council Fish and Wildlife Program amendments for wildlife mitigation. These activities have been selected in response to the Northwest Power Act to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

(dollars in thousands)

FY 2004	FY 2005	FY 2006
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**Residential Exchange** ..... 125,915    144,418    144,435

- Includes negotiated contract settlement agreement costs related to monetary benefits consistent with assumptions in the power rate case and subscription strategy.

**Northwest Power and Conservation Council** ..... 7,480    8,700    8,700

- Continue support of the Council activities, as directed under the Northwest Power Act, including regional power plan development and maintenance, and fish and wildlife program activities.

**Conservation and Energy Efficiency** ..... 60,521    62,208    63,472

- Continue close-out of the Legacy conservation resource acquisition contracts, which support Bonneville's contractual obligation to serve customer load growth. As part of the power subscription strategy and the 2002 Power Rate Case, Bonneville implemented a conservation and renewables rate credit system for utility customers.
- Provide credible, unbiased information or technical or financial support to conservation purposes. As an agency of the DOE, and with independent responsibilities based on its authorizing legislation, Bonneville has a statutory responsibility to provide support to certain conservation objectives that are governmental in nature, such as assisting in the development of emerging technologies and providing unbiased information to consumers. Bonneville is participating with other regional entities to support market transformation and development activities that meet the needs of Bonneville customers and create business opportunities for the private sector in the Pacific Northwest.
- Seek to make the existing energy efficiency marketplace larger by helping to remove barriers which customers face in the development of conservation projects. This opens up possibilities that have previously been foreclosed, thus serving to "grow the pie" or expand business opportunities for our private and public sector partners. This activity must be self-supporting; that is, payments from customers must cover all of the costs of performing the service.



(dollars in thousands)

FY 2004	FY 2005	FY 2006
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- Create and enhance markets for energy efficiency and end-use renewables through delivery of public benefits. Promote the development and implementation of new energy efficiency technologies. Provide leadership and collaborative funding for market transformation initiatives. Continue activities being performed through the regionally funded Northwest Energy Efficiency Alliance through a multi-party agreement that was signed in 2000 and extended at the same funding level in 2004. Support the Energy Web, a program advancing innovation and deployment of new energy technologies. This program will: 1) provide benefit to the Pacific Northwest; 2) promote standards and technology development deployment to achieve business benefits for Bonneville and its customers; and 3) promote the “Green” aspects of the Energy Web. Implications of participation in Energy Web development include:
  - Improve integration and consideration of non-wires solutions in the transmission planning process.
  - Diversify Bonneville risk hedges to include physical alternatives such as demand reductions and peak generation.
  - Demonstrate potential to reduce peak loads and transmission needs.
  - Clarify location benefits associated with peak load reduction, power and system reliability, power quality, and avoiding greenhouse gas production.

<b>Total, Power Business Line – Operating Expense. . .</b>	<u>1,995,271</u>	<u>2,226,046</u>	<u>2,234,431</u>
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## Explanation of Funding Changes

FY 2006 vs. FY 2005 (\$000)
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### Production

- Small decrease reflects primarily a shift in Energy Northwest Project debt service . . . . . -255

### Associated Project Costs

- Small increase due to security, biological opinion requirements, and improvements, replacements, and minor additions at the projects . . . . . +7,363

### Fish and Wildlife

- Small decrease reflects funding associated with Biological Opinion activities -4

### Residential Exchange

BPA/PBL - Operating Expense

FY 2006 Congressional Budget

■ Minor change .....	+17
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**Northwest Power and Conservation Council**

■ No change .....	0
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**Conservation and Energy Efficiency**

■ Small increase reflects increased emphasis on conservation activities. ....	+1,264
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<b>Total Funding Change, Power Business Line - Operating Expense .....</b>	<b>+8,385</b>
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# Transmission Business Line - Operating Expense

## Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2004	FY 2005	FY 2006	\$ Change	% Change
Engineering .....	36,902	72,042	76,709	+4,667	+6.5%
Operations .....	92,204	90,005	95,827	+5,822	+6.5%
Maintenance .....	108,857	119,073	125,523	+6,450	+5.4%
Total, Transmission Business Line - Operating Expense .....	237,963	281,120	298,059	+16,939	+6.0%

## Description

This activity provides for the transmission system services of engineering, operations, and maintenance for Bonneville's electric transmission system of over 15,000 circuit miles (24,135 circuit kilometers) of lines, 284 substations, and associated power system control and communication facilities with an invested cost of more than \$4.8 billion. Primary strategies of this program are: 1) maintain the safety and reliability of the transmission system; 2) increase the focus on customers; 3) optimize the transmission system; and 4) provide open and nondiscriminatory transmission access; and 5) improve Bonneville's cost effectiveness.

## Detailed Justification

	(dollars in thousands)		
	FY 2004	FY 2005	FY 2006
<b>Engineering .....</b>	<b>36,902</b>	<b>72,042</b>	<b>76,709</b>

Continue efforts to identify best methods for improving system reliability and maintenance practices, and continue cost reduction efforts by identifying opportunities for low-cost reinforcement and voltage support of the existing transmission system.

- R&D: Conduct in-house transmission system research and development, including (1) studies on reliability, HVDC (high voltage direct current) and HVAC outage reduction, (2) methods to update existing facilities and reduce maintenance costs including reliability-centered monitoring and recording methods for analysis.
- Technical Support: Provide technical support activities, such as transmission system planning and studies to optimize portions of the system. Provide support for non-wires solutions studies and pilot projects.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

- **Capital-to-Expense Adjustments:** Conduct annual analysis of Bonneville's outstanding capital work orders to assess whether they should be expensed.
- **Reimbursable Transactions:** Enter into written agreements with Federal and non-Federal entities that have work or services to be performed by Bonneville staff at the expense of the benefiting utilities. The projects must be beneficial, under agreed upon criteria, to Bonneville operations and to the Federal or non-Federal entity involved. Additionally, these activities contribute to more efficient or reliable construction of the Federal transmission system or otherwise enhance electric service to the region.
- **Leased and Other Costs:** Includes leases and other costs of transmission, delivery and voltage support facilities when such arrangements are operationally feasible and cost effective to deliver power.

<b>Operations .....</b>	<b>92,204</b>	<b>90,005</b>	<b>95,827</b>
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- **FY 2004:** Continued to operate within parameters of regional transmission authorities. Prepared for increased complexity of outage scheduling, transmission scheduling, and dispatching, as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continued development and implementation of business systems and tools. Participated in planning and preparation for potential establishment of an RTO.
- **FY 2005:** Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching, as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continue development and implementation of business systems and tools. Participate in planning and preparation for potential establishment of an RTO.
- **FY 2006:** Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching, as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training students, apprentices, and skilled replacements. Continue development and implementation of business systems and tools. Participate in planning and preparation for potential establishment of an RTO.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

- Substation Operations: Perform operations functions necessary to provide electric service to customers and to protect the Federal investment in electric equipment. Includes equipment adjustments, switching lines and equipment during emergencies or maintenance, isolating damaged equipment, restoring service to customers, and inspecting equipment, reading meters, et cetera.
- Power System Control and Dispatching: Perform central dispatching, control, and monitoring of the electric operation of the Federal transmission system. Also includes load, frequency, and voltage control of Federal generating plants, and operation of the system control and data computers at Dittmer and Munro Control Centers.
- Marketing, Sales, and Services: Provide management and direction of transmission rates, and provide business strategy in marketing of transmission and ancillary products and services of the Transmission Business Line. Involve customers and constituents in the process of product and rate development. Maintain accurate and complete historical records of current and past transmission agreements. Provide guidance for current and future transmission contract negotiations. Provide financial analysis of market strategies. Monitor and report on the financial health of the transmission business line. Support cost management by effective reporting and analysis of current expenditures. Ensure official budget submittals reflect current management financial strategies and adequately fund transmission programs.
- Transmission Scheduling: Provide open access to the Federal transmission system consistent with the Open Access Transmission Tariff approved by FERC. Schedule and market transmission capacity to Bonneville customers, California ISO, and Pacific Northwest's interconnected utilities. Manage the reservations and scheduling of all transmission services associated with the Open Access Transmission Tariff.

<b>Maintenance</b> .....	<b>108,857</b>	<b>119,073</b>	<b>125,523</b>
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In all aspects of maintenance, Bonneville is continuing the implementation of Reliability-Centered Maintenance (RCM) practices. This change is focused on improving system reliability and increasing availability in a deregulated market. Access road maintenance costs are expected to increase dramatically as Bonneville addresses the aging roads system and environmental constraints associated with construction, enhancement, and maintenance of access roads. The Bonneville transmission system encompasses approximately 50,000 miles of access roads. Cost for maintenance activities are budgeted at \$1,000,000 annually.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

- FY 2004: Continued to refine RCM practices at all of Bonneville's O&M regions. Continued to improve performance meeting System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) targets. Continued efforts to achieve the SAIFI and SAIDI targets of no control chart violations for circuit importance categories 1-2 (highest importance), and not more than one violation for category 4. Control charts are statistically based graphs that illustrate variability in performance. Continued to improve availability performance in a deregulated market by utilizing more efficient and cost-effective maintenance work practices and outage coordination. Used recruitment incentives to ensure succession of the current work force and remain competitive as an employer in the utility industry. Assured a safe work environment through safety awareness and improved work practices. Increased outage scheduling planning to increase customer satisfaction. Continued high levels of vegetation management and increased access road work to provide reliable access to facilities and ensure environmental compliance.
- FY 2005: Continue to refine RCM practices at all of Bonneville's O&M regions. Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to improve system availability performance through new maintenance procedures and work practices. Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage scheduling and coordination planning to increase customer satisfaction and system availability. Increase emphasis on non-electric facilities to compensate for years of deferral. Continue high levels of vegetation management, implementation of an aggressive access road management plan to maintain roads at a level that maximizes response time, increases reliability, and ensures environmental compliance.
- FY 2006: Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to improve system availability performance through new maintenance procedures and work practices. Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning and coordination to increase customer satisfaction and system availability. Maintain vegetation management levels to ensure system reliability. Continue access road work to provide reliable access to facilities and ensure environmental compliance.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

- **Transmission Line Maintenance:** Maintain and repair nearly 15,000 circuit miles (24,135 km) of high voltage transmission lines, of which over 6,436 km (4,000 circuit miles) are 500-kV transmission EHV (extra-high voltage), for which maintenance is two and one-half times more labor-intensive than maintenance of lower transmission voltages, although more efficient in transmission of power. This responsibility includes maintaining transmission rights-of-way to ensure system reliability, safety, and environmental compliance. Adopt work practices that improve system availability and reliability.
- **Substation Maintenance:** Maintain and repair the transmission system power equipment located in Bonneville's 284 substations. Work includes inspections, diagnostic testing, and predictive and condition based maintenance.
- **System Protection Maintenance:** Maintain relaying metering and remedial action scheme equipment used to control and protect the electrical transmission system and to meter energy transfers for the purpose of revenue billing. Additionally, field-engineering services provide technical advice and assure the correct operation of power system relaying and special control systems used to support interregional energy transmission capabilities.
- **Power System Control Maintenance:** Test, repair, and provide field engineering support of Bonneville's highly complex equipment, communications, and control systems, including seven major microwave systems, fiber optic systems, and other critical communications and control equipment that support the power system.
- **Non-Electric Plant Maintenance:** Maintain Bonneville's non-electric facilities. Includes site, building, and building utility maintenance; custodial services; station utility; and other maintenance service activities on Bonneville-owned or Bonneville-leased non-electric facilities.
- **Maintenance Standards and Engineering:** Establish, monitor, and update system maintenance standards, policies, and procedures, and review and update long-range plans for maintenance of the electric power transmission system.

**Total, Transmission Business Line - Operating Expense .....**

<b>237,963</b>	<b>281,120</b>	<b>298,059</b>
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## Explanation of Funding Changes

	FY 2006 vs. FY 2005 (\$000)
<b>Engineering</b>	
■ Minor increase reflects changes in program activities. . . . .	+4,667
<b>Operations</b>	
■ Increase primarily due to deferred program costs offset by near-term cost efficiencies. . . . .	+5,822
<b>Maintenance</b>	
■ Increase primarily due to deferred program costs offset by near-term cost efficiencies . . . . .	+6,450
<b>Total Funding Change, Transmission Business Line – Operating Expense. . . . .</b>	<hr/> <b>+16,939</b> <hr/>



# Interest, Pension and Post-retirement Benefits - Operating Expense and Capital Transfers

## Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2004	FY 2005	FY 2006	\$ Change	%Change
BPA Bond Interest (Net) . . . . .	104,454	158,468	175,445	+16,977	+10.7%
BPA Appropriation Interest . . . . .	61,778	45,125	44,062	-1,063	-2.4%
Corps of Engineers Appropriation Interest . . . . .	152,863	150,717	142,714	-8,003	-5.3%
Lower Snake River Comp Plan Interest . . . . .	16,450	16,453	16,453	0	0.0%
Bureau of Reclamation Appropriation Interest . . . . .	42,396	42,341	42,341	0	0.0%
Subtotal, Interest – Operating Expense	377,941	413,104	421,015	+7,911	+1.9%
Pension and Post-retirement Benefits . . .	30,900	26,500	23,150	-3,350	-12.6%
Total, Interest, Pension and Post-retirement Benefits . . . . .	408,841	439,604	444,165	+4,561	+1.0%

## Operating Expense

### Description

Interest expense provides for the payment of interest due on FCRPS debt. This consists of capital investment in FCRPS hydroelectric generating and transmission facilities of Bonneville, the Corps and the Bureau. Investments were financed by Congressional appropriations and Bonneville borrowings from the Treasury. Bonneville repays FCRPS debt through its power sales and transmission services revenues.

Since receiving Treasury borrowing authority in 1974 under the Transmission System Act, all Bonneville borrowing has been at market rates. As of October 1, 1996, all of Bonneville's repayment obligations on FCRPS appropriated investment (Corps and Bureau FCRPS investment and Bonneville investment) financed with appropriations prior to the Transmission System Act that were unpaid as of September 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 called for resetting (reducing) the unpaid principal of FCRPS appropriations and reassigning (increasing) interest rates. New principal amounts were established as of the beginning of FY 1997 at the present value of the principal and annual interest payments Bonneville would make to the Treasury for

these obligations in the absence of the legislation, plus \$100 million. The new principal amounts are then assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment obligations on appropriations at the end of FY 1996 were \$6.7 billion with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion with a weighted average interest rate of 7.1 percent. Implementation of the refinancing took place in 1997 after audited actual financial data was available. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the Bonneville Appropriations Refinancing Act to Treasury for their review and approval. Treasury approved the implementation calculations in July 1997. The Act also calls for all future FCRPS appropriations to be assigned prevailing Treasury yield curve interest rates.

Interest estimates are a direct function of costs of Treasury borrowing to Bonneville, repayment status of outstanding FCRPS investments, and projected additions to FCRPS plant in service. These estimates may change over time depending on forecasted market conditions. The interest cost estimates below include the impact of Bonneville's appropriation refinancing legislation.

Bonneville has been paying its unfunded liability of the Civil Service Retirement System (CSRS) and post-retirement benefits into the General Fund of the Treasury (receipt account 892889) since FY 1998. These payments are consistent with the FY 2001 Administration's budget which assumed Bonneville would prospectively cover the full unfunded liability that accrues in fiscal years after FY 1997 of the Civil Service Retirement and Disability Fund (Disability Fund), the Employees Health Benefits Fund (Health Fund), and the Employees Life Insurance Fund (Insurance Fund) that it had not covered prior to FY 1998. As part of the FY 2001 Administration's Budget, Bonneville assumed its entire CSRS cost recovery would be phased in over a ten-year period, given that wholesale power and transmission rates for Bonneville were contractually frozen until the end of FY 2001 in order to meet competitive market pressures. For the Remainder of the ten-year period, Bonneville paid \$31 million in FY 2004 and the following amounts are assumed to be recovered by Bonneville through rates and paid into the General Fund of the Treasury: \$26.5 million in FY 2005, \$23.2 million in FY 2006, and \$21.1 million in FY 2007. BPA expects to satisfy its prior year commitments for under funded CSRS and post-retirement benefits by FY 2007. Cost estimates include Pension and Post-retirement Benefits for Bonneville and the power-related portion of the Corps, Bureau, and USFWS.

# Capital Transfers

## Funding Schedule by Activity

(Accrued Expenditures)

(dollars in thousands)

	FY 2004	FY 2005	FY 2006	\$ Change	% Change
Bonneville Bond Amortization . . . . .	277,454	200,000	230,100	+30,100	+15.1%
Bureau Appropriation Amortization . . . .	758	0	7	+7	NA
Bonneville Appropriation Amortization . .	206,356	15,001	48,546	+33,545	+223.6%
Corps Appropriation Amortization . . . .	113,894	88,097	92,907	+4,810	+5.5%
Total, Capital Transfers . . . . .	598,462	303,098	371,560	+68,462	+22.6%

## Description

This activity conveys funds to the Treasury for repayment of certain FCRPS costs not included in the Associated Project Costs budget. Since capital transfers are cash transactions, they are not considered budget obligations. The total FY 2004 Capital Transfers amount includes \$346 million of advanced amortization or prepayment of Treasury debt consistent with BPA's capital strategy plan and debt optimization plan. The cumulative amount of advance amortization payments as of the end of FY 2004 is about \$1,146 million.

# BONNEVILLE POWER ADMINISTRATION

## TOTAL OBLIGATIONS/OUTLAYS

(in millions of dollars)

KFF 26-Jan-05

### BP-1 SUMMARY

1,3/

1 Residential Exchange

2 Power Business Line 2/

3 Transmission Business  
Line

4 Conservation & Energy  
Efficiency

5 Fish & Wildlife

6 Interest/ Pension 4/

7 Associated Project Cost -  
Capital

8 Capital Equipment

9 Planning Council

10 Misc. Accounting Adjs.

11 Projects Funded in  
Advance

12 Capitalized Bond  
Premiums

**TOTAL OBLIGATIONS/  
OUTLAYS 3/**

2004		2005		2006		2007	2008	2009	2010
Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
126	126	144	144	144	144	180	180	180	180
1,663	1,663	1,872	1,872	1,880	1,880	1,566	1,444	1,521	1,499
512	512	479	479	565	565	651	595	577	656
78	78	95	95	92	92	96	95	94	94
147	147	175	175	175	175	175	175	175	175
409	409	440	440	444	444	482	514	549	571
111	111	131	131	119	119	133	145	137	123
28	28	35	35	36	36	37	33	35	36
7	7	9	9	9	9	9	9	9	10
1,233	0	0	0	0	0	0	0	0	0
41	41	154	154	147	147	118	20	20	20
0	0	0	0	0	0	0	5	3	3
<b>4,355</b>	<b>3,122</b>	<b>3,534</b>	<b>3,534</b>	<b>3,611</b>	<b>3,611</b>	<b>3,447</b>	<b>3,215</b>	<b>3,300</b>	<b>3,367</b>

## REVENUES AND REIMBURSEMENTS

(in millions of dollars)

BP-1 SUMMARY	FISCAL YEAR									
	2004		2005		2006		2007	2008	2009	2010
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
13 Revenues 5/	3,369	3,369	3,346	3,346	3,429	3,429	3,290	3,164	3,244	3,293
14 Project Funded in Advance	41	41	154	154	147	147	118	20	20	20
15 <b>TOTAL</b>	<b>3,410</b>	<b>3,410</b>	<b>3,500</b>	<b>3,500</b>	<b>3,576</b>	<b>3,576</b>	<b>3,408</b>	<b>3,184</b>	<b>3,264</b>	<b>3,313</b>
<b>BUDGET AUTHORITY (NET)</b>	<b>1,403</b>		<b>(10)</b>		<b>(10)</b>		<b>(9)</b>	<b>(10)</b>	<b>(10)</b>	<b>(10)</b>
16 <b>OUTLAYS (NET) 6/</b>		<b>(61)</b>		<b>(10)</b>		<b>(10)</b>	<b>(9)</b>	<b>(10)</b>	<b>(10)</b>	<b>(10)</b>

**The accompanying notes are an integral part of this table.**

- 1/ This FY 2006 budget includes capital and expense estimates for the Power Business Line (PBL) based on updated estimates since the 2005 SN CRAC rate proposal. The outyear power estimates included in this budget were the basis for development of the Power Function Review (PFR) Public Process on program levels, initiated in January 2005. The Transmission Business Line (TBL) capital and expense estimates are based on initial TBL PIR funding estimates and were the basis for development of the FYs 2006-2007 initial transmission rates proposal. This data is consistent with BPA's full-cycle financial management approach to budgeting that links strategic direction and implementation through targets and performance measures.

Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2004 costs are based on BPA's audited actual financial results.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

- 2/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 3/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.
- 4/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension and Post-retirement Benefits cost estimates.
- 5/ Revenues are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming CRAC adjustments, reduced cost estimates, a net revenue risk adjustment, debt service refinancing strategies, and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, however causing the same net outlay result. Adjustments for depreciation and 4(h)(10)(C) are also assumed.
- 6/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that along with actual market conditions will impact revenues and expenses. Actual Net Outlays are volatile and are reported in SF-133. Estimated net outlay estimates could change due to changing market conditions, hydrological conditions, and continuing restructuring of the electric industry.

Misc. Acct Adjs for FY 2004 audited actual obligations consists primarily of long-term IOU exchange benefits obligations (\$1,008 million) and other long-term obligation requirements, consistent with BPA's FY 2004 Combined Schedules of Budgetary Resources.

BP-2

**EXPENSED OBLIGATIONS/OUTLAYS 1,4/****Current Services**

(in millions of dollars)

**FISCAL YEAR**

	2004		2005		2006		2007	2008	2009	2010
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange	126	126	144	144	144	144	180	180	180	180
2 Power Business Line 2/	1,663	1,663	1,872	1,872	1,880	1,880	1,566	1,444	1,521	1,499
3 Transmission Business Line	238	238	281	281	298	298	305	312	316	324
4 Conservation & Energy Efficiency	61	61	62	62	63	63	64	63	62	62
5 Fish & Wildlife	138	138	139	139	139	139	139	139	139	139
6 Interest/ Pension 3/	409	409	440	440	444	444	482	514	549	571
7 Planning Council	7	7	9	9	9	9	9	9	9	10
8 TOTAL EXPENSE										
9 Misc. Accounting Adjs.	1,233									
10 Projects Funded in Advance	41	41	154	154	147	147	118	20	20	20

**CAPITAL OBLIGATIONS/OUTLAYS**

(in millions of dollars)

**FISCAL YEAR**

BP-2 continued	2004		2005		2006		2007	2008	2009	2010
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
Conservation & Energy Efficiency	17	17	33	33	29	29	32	32	32	32
11 Transmission Business Line	274	274	198	198	267	267	346	283	261	332
12 Associated Project Cost	111	111	131	131	119	119	133	145	137	123
13 Fish & Wildlife	9	9	36	36	36	36	36	36	36	36
14 Capital Equipment	28	28	35	35	36	36	37	33	35	36
15 Capitalized Bond Premiums	0	0	0	0	0	0	0	5	3	3
16 <b>TOTAL CAPITAL INVESTMENTS 15</b>	<b>439</b>	<b>439</b>	<b>433</b>	<b>433</b>	<b>487</b>	<b>487</b>	<b>584</b>	<b>534</b>	<b>504</b>	<b>562</b>
17 <b>TREASURY BORROWING AUTHORITY TO</b>										
<b>FINANCE CAPITAL OBLIGATIONS 4,5/</b>	<b>439</b>		<b>433</b>		<b>487</b>		<b>584</b>	<b>534</b>	<b>504</b>	<b>562</b>
18 <b>TREASURY BORROWING AUTHORITY</b>										
<b>TO FINANCE OTHER OBLIGATIONS</b>	<b>(20)</b>		<b>(138)</b>		<b>(192)</b>		<b>(204)</b>	<b>(70)</b>	<b>(19)</b>	<b>(215)</b>
19 <b>TOTAL TREASURY BORROWING AUTHORITY :</b>	<b>480</b>		<b>295</b>		<b>295</b>		<b>380</b>	<b>464</b>	<b>527</b>	<b>347</b>

**The accompanying notes are an integral part of this table.**

- 1/ This FY 2006 budget includes capital and expense estimates for the Power Business Line (PBL) based on updated estimates since the 2005 SN CRAC rate proposal. The outyear power estimates included in this budget were the basis for development of the Power Function Review (PFR) Public Process on program levels, initiated in January 2005. The Transmission Business Line (TBL) capital and expense estimates are based on initial TBL PIR funding estimates and were the basis for development of the FYs 2006-2007 initial transmission rates proposal. This data is consistent with BPA's full-cycle financial management approach to budgeting that links strategic direction and implementation through targets and performance measures.

Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2004 costs are based on BPA's audited actual financial results.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

- 2/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

- 3/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension and Post-retirement Benefits cost estimates.

- 4/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.

- 5/ Treasury Borrowing Authority to Finance Other Obligations represents the use of (positive), or building up of (negative), deferred borrowing. Deferred borrowing is created when Bonneville uses cash from revenues to liquidate capital obligations in lieu of Treasury borrowing. This creates the ability in future years to borrow money, when fiscally prudent, to liquidate revenue funded activities. The amount on this line, under the title "Treasury Borrowing Authority to Finance Other Obligations" represents the annual use or creation of deferred borrowing. OMB has requested that Bonneville show this deferred borrowing as a resource carried forward from year to year in the manner displayed here.

Misc. Acct Adjs for FY 2004 audited actual obligations consists primarily of long-term IOU exchange benefits obligations (\$1,008 million) and other long-term obligation requirements, consistent with BPA's FY 2004 Combined Schedules of Budgetary Resources.

BP-3

**CURRENT SERVICES**

(in millions of dollars)

**CAPITAL TRANSFERS**

Amortization:	
20 BPA Bonds	
21 Bureau Bonds	
22 BPA Appropriations	
23 Corps Appropriations	
24 <b>TOTAL CAPITAL TRANSFERS</b>	

2004 Pymts
277
1
206
114
<b>598</b>

**FISCAL YEAR**

2005 Pymts
200
0
15
88
<b>303</b>

2006 Pymts	2007 Pymts	2008 Pymts	2009 Pymts	2010 Pymts
230	219	245	210	261
0	0	0	1	0
49	71	64	40	98
93	85	64	101	0
<b>372</b>	<b>375</b>	<b>373</b>	<b>352</b>	<b>359</b>

25 <b>FULL-TIME EQUIVALENT (FTE)</b>
--------------------------------------

<b>3,136</b>
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**STAFFING**

<b>3,166</b>
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<b>3,166</b>	<b>3,204</b>	<b>3,204</b>	<b>3,204</b>	<b>3,204</b>
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# PROGRAM & FINANCING SUMMARY

Current Services  
(in millions of dollars)

Identification Code: 89-4045-0-3-271

est.

## Program by activities:

### Operating expenses:

	2004	2005	2006	2007	2008	2009	2010
0.01 Power Business Line	1,432	1,629	1,629	1,304	1,175	1,243	1,213
0.02 Residential Exchange	126	144	144	180	180	180	180
Associated Project Costs:							
0.05 Bureau of Reclamation	60	63	65	67	69	71	74
0.06 Corps of Engineers	137	145	149	159	163	168	172
0.07 Colville Settlement	17	17	18	17	17	18	18
0.19 U.S. Fish & Wildlife Service	17	18	19	19	20	21	22
0.20 Planning Council	7	9	9	9	9	9	10
0.21 Fish & Wildlife	138	139	139	139	139	139	139
0.23 Transmission Business Line	238	281	298	305	312	316	324
0.24 Conservation & Energy Efficiency	61	62	63	64	63	62	62
0.25 Interest	378	413	421	461	496	518	540
0.26 Pension and Health Benefits 1/	31	27	23	21	18	31	31
0.91 <b>Total operating expenses 2/</b>	<b>2,642</b>	<b>2,947</b>	<b>2,977</b>	<b>2,745</b>	<b>2,661</b>	<b>2,776</b>	<b>2,785</b>

### Capital investment:

1.01 Power Business Line	111	131	119	133	145	137	123
1.02 Transmission Line	274	198	267	346	283	261	332
1.03 Conservation & Energy Efficiency	17	33	29	32	32	32	32
1.04 Fish & Wildlife	9	36	36	36	36	36	36
1.05 Capital Equipment	28	35	36	37	33	35	36
1.06 Capitalized Bond Premiums	0	0	0	0	5	3	3
1.07 <b>Total Capital Investment 3/</b>	<b>439</b>	<b>433</b>	<b>487</b>	<b>584</b>	<b>534</b>	<b>504</b>	<b>562</b>
1.08 Misc. Accounting Adjustments	1,233						
2.01 Projects Funded in Advanced	41	154	147	118	20	20	20
10.00 <b>Total obligations 4/</b>	<b>4,355</b>	<b>3,534</b>	<b>3,611</b>	<b>3,447</b>	<b>3,215</b>	<b>3,300</b>	<b>3,367</b>

The accompanying notes are an integral part of this table.

1/ See interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.

2/ Reflects expense obligations, not accrued expenses.

The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

3/ Reflects capital obligations, not capital expenditures.

4/ This FY 2006 budget includes capital and expense estimates for the Power Business Line (PBL) based on updated estimates since the 2005 SN CRAC rate proposal. The outyear power estimates included in this budget were the basis for development of the Power Function Review (PFR) Public Process on program levels, initiated in January 2005. The Transmission Business Line (TBL) capital and expense estimates are based on initial TBL PIR funding estimates and were the basis for development of the FYs 2006-2007 initial transmission rates proposal. This data is consistent with BPA's full-cycle financial management approach to budgeting that links strategic direction and implementation through targets and performance measures.

Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2004 costs are based on BPA's audited actual financial results.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

Refer to 16 USC Chapters 12B, 12G, 12H, and BPA's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

Misc. Acct Adjs for FY 2004 audited actual obligations consists primarily of long-term IOU exchange benefits obligations (\$1,008 million) and other long-term obligation requirements, consistent with BPA's FY 2004 Combined Schedules of Budgetary Resources.

**Program and Financing (continued)**

Current Services  
(in millions of dollars)

		est.						
		2004	2005	2006	2007	2008	2009	2010
Financing:								
21.90	Unobligated balance available, start of year. Treasury balance 3/	(121)	(240)	(240)	(240)	(240)	(240)	(240)
24.40	Unobligated balance available, end of year. Treasury balance 3/	0	(240)	(240)	(240)	(240)	(240)	(240)
25.00	Unobligated balance lapsing	0	0	0	0	0	0	0
39.00	<b>Budget authority (gross)</b>	<b>4,631</b>	<b>3,727</b>	<b>3,727</b>	<b>3,560</b>	<b>3,627</b>	<b>3,692</b>	<b>3,802</b>
Budget Authority:								
61.00	Transfer to other accounts	(75)						
66.10	Contract Authority	1,202						
67.10	Permanent Authority: Authority to borrow from Treasury (indefinite) 4/	480	295	295	380	464	527	347
69.00	Spending authority from off-setting collections	3,317	3,737	3,737	3,408	3,184	3,264	3,313
69.47	Portion applied to debt reduction 5/	(277)	(305)	(305)	(443)	(309)	(312)	(261)
69.90	<b>Spending authority from offsetting collections (adjusted)</b>	<b>3,025</b>	<b>3,432</b>	<b>3,432</b>	<b>3,180</b>	<b>3,163</b>	<b>3,165</b>	<b>3,455</b>
Relation of obligations to outlays:								
71.00	Total obligations	4,355	3,534	3,611	3,447	3,215	3,300	3,367
Obligated balance, start of year:								
72.47	Authority to borrow	414	617	617	617	617	617	617
74.47	Authority to borrow	(617)	(617)	(617)	(617)	(617)	(617)	(617)
87.00	Outlays (gross)	3,256	3,727	3,727	3,560	3,627	3,692	3,802
Adjustments to budget authority and outlays:								
Deductions for offsetting collections:								
88.00	Federal funds	(38)	(90)	(90)	(90)	(90)	(90)	(90)
88.40	Non-Federal sources	(3,279)	(3,647)	(3,647)	(3,479)	(3,547)	(3,612)	(3,722)
88.90	Total, offsetting collections	(3,317)	(3,737)	(3,737)	(3,569)	(3,637)	(3,702)	(3,812)
89.00	<b>Budget authority (net)</b>	<b>1,403</b>	<b>(10)</b>	<b>(10)</b>	<b>(9)</b>	<b>(10)</b>	<b>(10)</b>	<b>(10)</b>
90.00	<b>Outlays (net) 6/</b>	<b>(61)</b>	<b>(10)</b>	<b>(10)</b>	<b>(9)</b>	<b>(10)</b>	<b>(10)</b>	<b>(10)</b>

**The accompanying notes are an integral part of this table.**

3/ Treasury balance and unobligated balance estimates assume that BPA will borrow from Treasury the amount needed to finance the full capital program. Actual Treasury borrowing and cash balances will be different, depending on net revenues, Treasury interest rates, and other cash management factors. Borrowing could be higher such that cash balances at the end of each year could equal total reserves.

- 4/ The Permanent Authority: Authority to borrow (indefinite) from Treasury amounts reflect both BPA's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing is created when, as a cash and debt management decision, BPA uses cash from revenues to liquidate capital obligations in lieu of borrowing from Treasury. This temporary use of cash on hand instead of borrowed funds creates the ability in future years to borrow money, when fiscally prudent. Technical Executive Branch budget display and tracking requirements have modified the way BPA shows this deferred borrowing as a resource carried forward from year-to-year. This amount must therefore be added to, or subtracted from, BPA's current year Treasury borrowing authority amount, making this number a combination of capital program financing needs and the annual use, or creation of deferred borrowing. The FY 1989 Energy and Water Development Appropriations Act (P.L. 100-371 of 7/19/88) clarified that BPA has authority to incur obligations in excess of Treasury borrowing authority and cash in the BPA Fund. The two amounts which comprise the net amount of line 67.10 above are as follows:

	FISCAL YEAR						
	2004	2005	2006	2007	2008	2009	2010
<b>Treasury Borrowing Authority:</b>							
to finance capital obligations	500	433	487	584	534	546	562
to finance other obligations	(20)	(138)	(192)	(204)	(70)	(19)	(215)
<b>Total Treasury Borrowing Authority (67.10)</b>	<b>480</b>	<b>295</b>	<b>295</b>	<b>380</b>	<b>464</b>	<b>527</b>	<b>347</b>

- 5/ Includes amortization of BPA and Corps of Engineers appropriations and amortization of BPA bonds. Line 69.47 is referred to as capital transfers on BP-3.
- 6/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that along with actual market conditions will impact revenues and expenses. Actual Net Outlays are volatile and are reported in SF-133. Estimated net outlay estimates could change due to changing market conditions, hydrological conditions, and continuing restructuring of the electric industry.

Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming CRAC adjustments, reduced cost estimates, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, however causing the same net outlay result. Adjustments for depreciation and 4(h)(10)(C) are also assumed.

**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of TREASURY BORROWING**  
**CURRENT SERVICES**  
(in millions of dollars)

BP-4A

	Fiscal Year							
	2004				2005			
	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out- Standing
<b>Start-of-Year: Total</b>	3,069	3,069	2,755	2,697	1,837	3,231	162	2,900
<b>Plus: Annual Increase 1/</b>								
Cum.-Annual Treasury Borrowing	439	439	439		433	433	433	
Treasury Borrowing (Cash)				480				433
<b>Less:</b>								
Total BPA Bond Amortization	277	277	277	277	200	200	200	200
<b>Net Increase/(Decrease):</b>								
Total	162	162	162	203	233	233	233	233
Cum.-End-of-Year: Total	1,837	3,231	2,917	2,900	3,089	3,464	395	3,133
<b>Total Remaining Treasury Borrowing Amount</b>				<u>1,550</u>				<u>1,317</u>
<b>Total Legislated Treasury Borrowing Amount</b>				4,450				4,450

**The accompanying notes are an integral part of this table.**

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital investments reflect management decisions from BPA's Cross-Agency Business Operations Board review process.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

Notes concerning FY 2004: BPA Bond Amortization includes a portion of future planned amortization consistent with BPA's capital strategy plan and debt optimization plan.

BPA Revenue financing of \$15 million as part of TBL capital-PFIA is included for FYs 2004 and 2005.

**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of TREASURY BORROWING**  
**CURRENT SERVICES**  
(in millions of dollars)

BP-4B

	Fiscal Year				Fiscal Year			
	2006		2007		2006		2007	
	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing
<b>Start-of-Year: Total</b>	1,667	3,464	395	3,133	1,925	3,722	653	3,391
<b>Plus: Annual Increase 1/</b>								
Cum.-Annual Treasury Borrowing	488	488	488		584	584	584	
Treasury Borrowing (Cash)				488				584
<b>Less:</b>								
Total BPA Bond Amortization	230	230	230	230	219	219	219	219
<b>Net Increase/(Decrease):</b>								
Total	258	258	258	258	365	365	365	365
Cum.-End-of-Year: Total	1,925	3,722	653	3,391	2,290	4,087	1,018	3,756
<b>Total Remaining Treasury Borrowing Amount</b>				<u>1,059</u>				<u>694</u>
<b>Total Legislated Treasury Borrowing Amount</b>				4,450				4,450

**The accompanying notes are an integral part of this table.**

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Capital investments reflect management decisions from BPA's Cross-Agency Business Operations Board review process.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

BPA Revenue financing of \$15 million as part of TBL capital-PFIA is included for FYs 2004 and 2005.

**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of TREASURY BORROWING**  
**CURRENT SERVICES**  
(in millions of dollars)

BP-4C

	Fiscal Year							
	2008		2009		2008		2009	
	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing
<b>Start-of-Year: Total</b>	2,290	4,087	1,018	3,756	2,581	4,378	1,309	4,047
<b>Plus: Annual Increase 1/</b>								
Cum.-Annual Treasury Borrowing	535	535	535		504	504	504	
Treasury Borrowing (Cash)				535				504
<b>Less:</b>								
Total BPA Bond Amortization	244	244	244	244	211	211	211	211
<b>Net Increase/(Decrease):</b>								
Total	291	291	291	291	293	293	293	293
Cum.-End-of-Year: Total	2,581	4,378	1,309	4,047	2,874	4,671	1,602	4,340
<b>Total Remaining Treasury Borrowing Amount</b>				<u>403</u>				<u>110</u>
<b>Total Legislated Treasury Borrowing Amount</b>				4,450				4,450

**The accompanying notes are an integral part of this table.**

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital investments reflect management decisions from BPA's Cross-Agency Business Operations Board review process.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

BPA Revenue financing of \$15 million as part of TBL capital-PFIA is included for FYs 2004 and 2005.

**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of TREASURY BORROWING  
CURRENT SERVICES**

(in millions of dollars)

BP-4D

		Fiscal Year			
		<b>2010</b>			
		Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing
<b>Start-of-Year: Total</b>		2,874	4,671	1,602	4,340
<b>Plus: Annual Increase 1/</b>					
Cum.-Annual Treasury Borrowing		561	561	561	
Treasury Borrowing (Cash)					561
<b>Less:</b>					
Total BPA Bond Amortization		261	261	261	261
<b>Net Increase/(Decrease):</b>					
Total		300	300	300	300
Cum.-End-of-Year: Total		3,174	4,971	1,902	4,640
<b>Total Remaining Treasury Borrowing Amount</b>					<u>(190)</u>
<b>Total Legislated Treasury Borrowing Amount</b>					<b>4,450</b>

**The accompanying notes are an integral part of this table.**

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital investments reflect management decisions from BPA's Cross-Agency Business Operations Board review process.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

BPA Revenue financing of \$15 million as part of TBL capital-PFIA is included for FYs 2004 and 2005.

**TREASURY PAYMENTS**  
(in millions of dollars)

		FISCAL YEAR						
		2004	2005	2006	2007	2008	2009	2010
<b>A. INTEREST ON BONDS &amp; APPROPRIATIONS</b>								
<b>Bonneville Bond Interest</b>								
1	Bonneville Bond Interest (net)	105	158	175	214	246	268	299
2	AFUDC 1/	38	33	33	34	34	36	41
<b>Appropriations Interest</b>								
3	Bonneville	62	45	44	41	36	31	28
4	Corps of Engineers 2/	153	151	143	148	155	160	154
5	Lower Snake River Comp. Plan	16	16	16	16	16	16	16
6	Bureau of Reclamation 3/	42	42	42	42	42	42	42
7	<b>Total Bond and Approp. Interest</b>	<b>416</b>	<b>445</b>	<b>453</b>	<b>495</b>	<b>529</b>	<b>553</b>	<b>580</b>
<b>B. ASSOCIATED PROJECT COST</b>								
8	Bureau of Reclamation Irrigation Assistance	1	0	0	0	3	7	0
9	Bureau of Rec. O & M 4/	1	0	0	0	0	0	0
10	Corps of Eng. O & M 4/	2	0	0	0	0	0	0
11	L. Snake River Comp. Plan O & M 4/	0	0	0	0	0	0	0
12	<b>Total Assoc. Project Costs</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>0</b>
<b>C. CAPITAL TRANSFERS</b>								
<b>Amortization</b>								
13	Bonneville Bonds	277	200	230	219	245	210	261
14	Bureau of Reclamation Appropriations	1	0	0	0	0	1	0
15	Corps of Engineers Appropriations	114	88	93	85	64	101	0
16	Lower Snake River Comp. Plan	0	0	0	0	0	0	0
17	Bonneville Appropriations	206	15	49	71	64	40	98
	<b>Total Capital Transfers 5/</b>	<b>598</b>	<b>303</b>	<b>372</b>	<b>375</b>	<b>373</b>	<b>352</b>	<b>359</b>
<b>D. OTHER PAYMENTS</b>								
18	Unfunded CSRS Liability 6/	31	27	23	21	18	31	31
21	<b>TOTAL TREASURY PAYMENTS 7/</b>	<b>1,049</b>	<b>775</b>	<b>848</b>	<b>891</b>	<b>923</b>	<b>943</b>	<b>970</b>

The accompanying notes are an integral part of this table.

1/ This interest cost is capitalized and included in Bonneville's Transmission System Development, System Replacements, and Associated Projects Capital programs. AFUDC is financed through the sale of bonds.

2/ Includes interest on construction funding for Corp of Engineers (Corps) fish bypass facilities at Corps dams in the Columbia River Basin, including Lower Monumental, Ice Harbor, and The Dalles.

3/ Includes payments paid by Bureau to Treasury on behalf of Bonneville.

4/ Costs for power O&M is funded directly by Bonneville as follows (in millions)

FISCAL YEAR	2004	2005	2006	2007	2008	2009	2010
Bureau of Reclamation	60	63	65	67	69	71	74
Corps of Engineers	137	145	149	159	163	168	172
Lower Snake River Comp. Plan	17	18	19	19	20	21	22

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau cost savings of which \$3 million can be spent in a single fiscal year. Corps O&M budget estimates do not reflect approximately \$1.5 million in Corps cost savings.

Starting in FY 2005 all Corps O&M direct funding is expected to be accomplished through a transfer appropriation fund symbol. This will assure that the Bonneville Fund contains both the obligation and outlay for all Corps direct funded expenditures.

Bonneville, through FY 2006, also directly funds the Corps \$9.7 million annually and the Bureau \$2 million annually for small capital power O&M items. Funding for these small capital power items is included within the PBL capital budget.

5/ Includes planned advanced amortization, or prepayment to Treasury, of \$346 million in FY 2004 consistent with BPA's capital strategy plan and debt optimization plan. The cumulative amount of advance amortization payments as of the end of FY 2004 is \$1,146 million.

6/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

7/ Does not include Treasury bond premiums on refinanced Treasury bonds.



**OBJECT CLASSIFICATION STATEMENT**  
(in millions of dollars) 1/

IDENTIFICATION CODE: 89-4045-0-3-271  
DIRECT OBLIGATIONS

**ESTIMATES**

	2004	2005	2006
11.1 Full-time permanent	232	262	268
11.3 Other than full-time permanent			
11.5 Other personnel compensation	8	9	10
11.9 <b>Total personnel compensation</b>	<b>240</b>	<b>271</b>	<b>278</b>
12.1 Civilian personnel benefits	63	72	73
21.0 Travel and transportation of persons	11	12	12
22.0 Transportation of things	2	2	2
23.1 Rental payments to GSA			
23.2 Rents, other	23	26	26
23.3 Communication, utilities & misc. charges	6	6	6
24.0 Printing and reproduction			
25.1 Consulting Services			
25.2 Other Services	3,250	2,285	2,335
25.3 Purchases from Government Accounts			
25.4 O&M of Facilities			
25.5 R & D Contracts	2	2	2
26.0 Supplies and materials	46	52	53
31.0 Equipment			
32.0 Lands and structures	80	91	93
41.0 Grants, subsidies, contributions	53	60	61
43.0 Interest and dividends	579	655	670
99.0 <b>Total obligations</b>	<b>4,355</b>	<b>3,534</b>	<b>3,611</b>

- 1/ Includes object classifications developed from updated GL accounting codes consistent with implementation of BPA's business enterprise system of accounts. The object classifications are subject to change as BPA's GL accounting codes continue to evolve to more effectively meet management information needs, and meet FERC and Federal reporting requirements.

Other Services includes:

Misc. Acct Adjs for FY 2004 audited actual obligations consists primarily of long-term IOU exchange benefits obligations (\$1,008 million) and other long-term obligation requirements, consistent with BPA's FY 2004 Combined Schedules of Budgetary Resources.

**Estimate of Proprietary Receipts**  
(in millions of dollars)

	Fiscal Year						
	2004	2005	2006	2007	2008	2009	2010
Bureau Interest	42	42	42	42	42	42	42
Bureau Amortization	1	0	0	0	0	1	0
Bureau O&M	1	0	0	0	0	0	0
Bureau Irrig. Assist.	1	0	0	0	3	7	0
Revenues Collected by Bureau	-10						
Distributed in Treasury Account (credit)		-7	-7	-7	-7	-7	-7
Colville Settlement (credit)	-5	-5	-5	-5	-5	-5	-5
<b>Total 1/ Reclamation Fund</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>33</b>	<b>38</b>	<b>30</b>
Corps O&M	2						
CSRS	31	27	23	21	18	31	31
<b>Total 2/ Repayments on misc.costs</b>	<b>33</b>	<b>27</b>	<b>23</b>	<b>21</b>	<b>18</b>	<b>31</b>	<b>31</b>

1/ Includes amortization of appropriations and irrigation assistance, and interest costs for the Bureau of Reclamation. The cost of power O&M for Bureau of Reclamation is no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfer to Account #895000.26

2/ The costs of power O&M for Corps of Engineers and Lower Snake Comp. Plan are no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfers to Account #892889, Repayments on misc. recoverable costs, not otherwise classified. Costs for power O&M is funded directly by Bonneville as follows (in millions)

	2004	2005	2006	2007	2008	2009	2010
Bureau of Reclamation	60	63	65	67	69	71	74
Corps of Engineers	137	145	149	159	163	168	172
Lower Snake River Comp Plan	17	18	19	19	20	21	22

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau cost savings of which \$3 million can be spent in a single fiscal year. Corps O&M budget estimates do not reflect approximately \$1.5 million in Corps cost savings.

Starting in FY 2005 all Corps O&M direct funding is expected to be accomplished through a transfer appropriation fund symbol. This will assure that the Bonneville Fund contains both the obligation and outlay for all Corps direct funded expenditures.

Bonneville, through FY 2006, also directly funds the Corps \$9.7 million annually and the Bureau \$2 million annually for small capital power O&M items. Funding for these small capital power items is included within the PBL capital budget.

See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.

**BONNEVILLE POWER ADMINISTRATION**

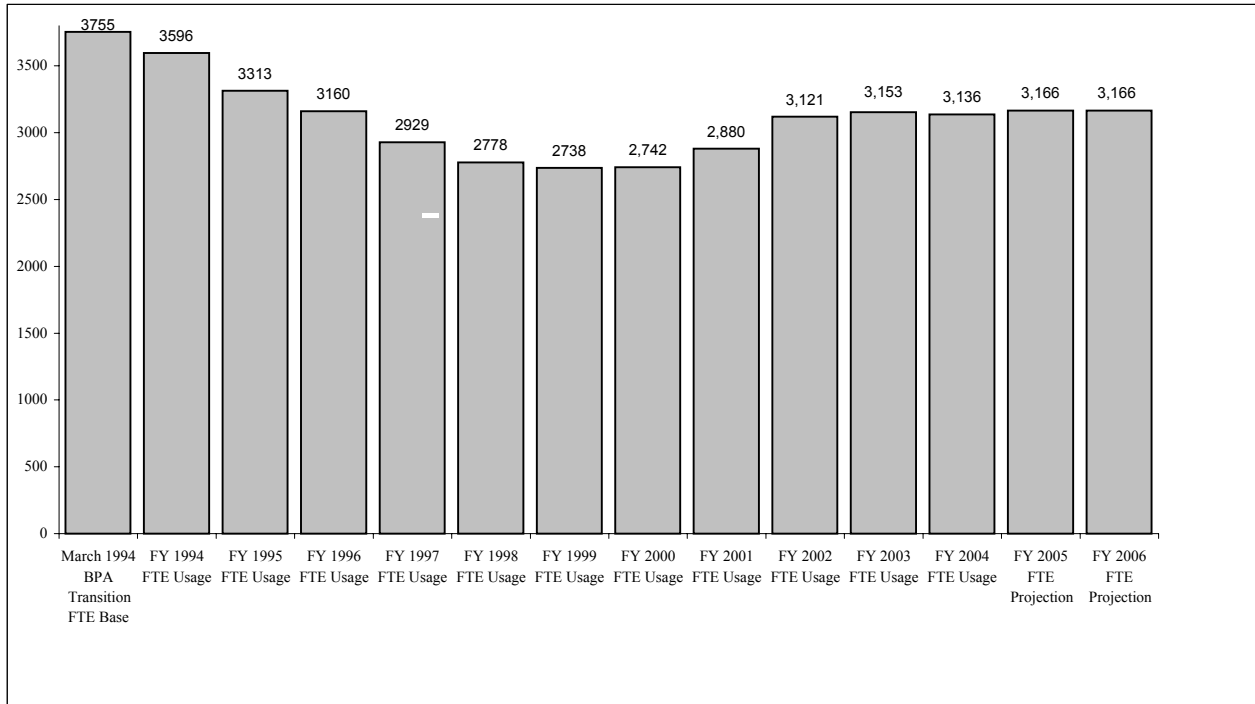
**FISH AND WILDLIFE COSTS <sup>1/ 2/</sup>**

<b>COST ELEMENT</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
<b><u>PROGRAM EXPENSES</u></b>								
BPA DIRECT FISH AND WILDLIFE PROGRAM	68.5	82.2	104.9	108.2	108.2	101.1	137.1	140.7
HIGH PRIORITY/ACTION PLAN EXPENSES						2.9	7.1	6.5
<b>REIMBURSABLE (ASSOC. PROJECTS - FEDERAL HYDRO)</b>								
O & M LOWER SNAKE RIVER HATCHERIES	11.5	11.8	11.4	13.0	12.4	12.7	15.1	15.1
O & M CORPS	18.2	18.9	18.5	19.9	19.7	23.1	28.2	30.3
O & M BUREAU	1.5	1.5	2.7	2.6	1.8	3.0	3.8	3.1
OTHER (NW POWER AND CONSERVATION COUNCIL)	4.2	3.7	3.7	3.4	3.7	3.7	4.0	4.0
SUBTOTAL (REIMB)	35.4	35.9	36.3	38.9	37.6	42.5	51.1	52.5
<b>TOTAL OPERATING EXPENSES</b>	<b>103.9</b>	<b>118.1</b>	<b>141.2</b>	<b>147.1</b>	<b>145.8</b>	<b>146.5</b>	<b>195.3</b>	<b>199.7</b>
<b><u>PROGRAM RELATED FIXED EXPENSES</u></b>								
INTEREST EXPENSE	51.1	52.4	48.9	49.4	49.5	48.7	30.0	28.0
AMORTIZATION EXPENSE	10.6	12.4	14.1	15.3	16.1	16.8	18.3	17.5
DEPRECIATION EXPENSE	11.4	11.5	11.1	11.4	11.6	11.6	8.3	11.2
<b>TOTAL FIXED EXPENSES</b>	<b>73.1</b>	<b>76.3</b>	<b>74.1</b>	<b>76.1</b>	<b>77.2</b>	<b>77.1</b>	<b>56.6</b>	<b>56.7</b>
<b>GRAND TOTAL PROGRAM EXPENSES</b>	<b>177.0</b>	<b>194.4</b>	<b>215.3</b>	<b>223.2</b>	<b>223.0</b>	<b>223.6</b>	<b>251.9</b>	<b>256.4</b>
<b><u>FOREGONE REVENUES AND POWER PURCHASES</u></b>								
FOREGONE REVENUES	81.7	107.8	116.5	197.8	193.1	115.9	12.6	79.2
BPA POWER PURCH. FOR FISH ENHANCEMENT (NET)	-	-	5.4	47.6	64.8	1,389.6	147.8	171.1
<b>TOTAL FOREGONE REVENUES AND POWER PURCHASES</b>	<b>81.7</b>	<b>107.8</b>	<b>121.9</b>	<b>245.4</b>	<b>257.9</b>	<b>1,505.5</b>	<b>160.4</b>	<b>250.3</b>
<b>TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, &amp; POWER PURCHASES</b>	<b>258.7</b>	<b>302.2</b>	<b>337.2</b>	<b>468.6</b>	<b>480.9</b>	<b>1,729.1</b>	<b>412.3</b>	<b>506.7</b>
<b><u>CREDITS</u></b>								
4(h)(10)(C) CREDITS	(25.5)	(29.7)	(35.7)	(46.0)	(50.4)	(336.6)	(66.4)	(35.4)
FISH COST CONTINGENCY FUND					(246.5)	(246.5)	-	(78.7)
<b>TOTAL CREDITS</b>	<b>(25.5)</b>	<b>(29.7)</b>	<b>(35.7)</b>	<b>(46.0)</b>	<b>(296.9)</b>	<b>(583.1)</b>	<b>(66.4)</b>	<b>(114.1)</b>

1/ These are audited actual costs reported on an accrual basis

2/ For purposes of this presentation, this financial information has been made publicly available by BPA in February 2005 and is consistent with the financial system of record used in preparation of the audited financial statements for the respective period reported.

**BONNEVILLE FTE**  
(Revised January 2005)



BPA has utilized the following number of Voluntary Separation Incentives (VSIs): 190 in FY 1994, 240 in FY 1995, 137 in FY 1996, 135 in FY 1997, 121 in FY 1998, 81 in FY 1999, 43 in FY 2000, 12 in FY 2001, 0 in FY 2002, 80 in FY 2003, and 0 in FY 2004.

BPA is currently in the process of seeking authority to offer a voluntary separation incentive (VSI) and voluntary early retirement authority (VERA) in FY 2005.

Due to cost management initiatives, BPA is currently assessing its FTE estimates and expects reductions in actual FTE levels that are planned to occur through attrition and as part of efforts to reduce costs to assure Bonneville's continued financial health.

Actual FTE data is consistent with DOE personnel reports.